



AUGUST 1994

F.A.R.FEST

1994

SUNDAY, SEPTEMBER 11, 1994

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**FCC Highlights * ARRL Report * VE Exams Schedule * Public Service Report
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Auto-Call is the Official Journal of the Foundation For Amateur Radio, Inc.®

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THE NEW GENERATION ROTATORS

THEY'RE NOT YOUR FATHER'S HAM "M"

Rotator Comparison Chart
The New Generation

	The New Generation									Old Generation	
Model/Specs	Create RCS	Create RCSA	Create RCSB	Emoto 105TSX	Emoto 747SRX	Emoto 1105MSX	Emoto 1200FOX	Emoto 1300MSAX	Emoto 1800FSX	Telex Ham/V	Telex T2X
Rotate Torque Ft/Lb	43	116	160	37	50	57	143	215	287	67	83
GD ² kg/m ² Ant. Inertia	N/A	N/A	N/A	100	400	700	1000	1800	3000	N/A	N/A
Bk. Static Torque Ft/Lb	506	1085	1450	215	502	717	1290	1792	2150	417	750
Wind Load in Tower (lb)	10	25	25	11	22	27	27	33	36	15	20
Mast mount	4	5	7	5	9	12	12	15	16	7.5	10
Rotating speed 360°	60-150 sec variable	60-150 sec variable	60-150 sec variable	55	35	65	40	77	80	60	60
Reverse Delay	None	2 sec	3 sec							None	None
Preset	Oct 3	Oct 3	yes	no	no	Opt	yes	yes	yes	no	no
Computer	no	no	no	no	yes	yes	yes	yes	yes	no	no
Power 120V 60Hz	80VA	140VA	200VA	70VA	70VA	70VA	90VA	120VA	150VA	26V AC	26V AC
Mast Dia	2-2.5 in	2-2.5 in	2-2.5 in	2-2.4 in	2-2.4 in	2-2.4 in	1.6-2.4 in	2.4-3.1 in	3.5-5.5 in	2 in	2 in
Control wire	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	8 cond	8 cond
Vertical max. load lb	880	1540	1540	660	1100	880	1760	1760	2200	400	800
Rotor wgt	13	17	20	7.5	9	11	11	13	39.5	24	28
Drive type	worm drive	worm drive	worm drive	disk	friction	friction	friction	friction	friction	wedge	wedge
Self center mast clamp	yes	yes	yes	Adj	Adj	Adj	Adj	Adj	Adj	no	no
Special notes	3-6	3-6	3-6	6	1-6	6	2-6	6	6	4-7	4-7
Pricing (\$)	\$269.00	449.95	799.00	209.95	399.00	589.00	679.00	1099.00	3272.00	369.95	439.95
With Preset	\$379.00	\$528.95				\$663.00					

Notes:

1. Telex Tribander 4700 in 35 seconds
2. T2X and Ham/V have same motor and gear train parts
3. 120V normal 220V special order

4. Variable speed 40 sec max
5. EEB prices as of 5/91 subject to change
6. Wind Load in Sq. Feet

7. Variable speed w/SCR constant rotational torque at any speed
8. 120/220 tapped transformer

THE NEW GENERATION

An entire generation of amateurs have grown up knowing only one rotator manufacturer. Those old favorites are still popular. But, now a new generation of rotators are out to set high standards with innovative features such as: large machined steel gears, cast and machined aluminum cases, solid state controllers for smooth start/stop, preset, computer control and circular position indicators.

The bottom line is... strong, long term reliability, ease of operation and cost effectiveness. When you erect an antenna system the last thing you need is rotor problems!

CREATIVE DESIGN ROTATORS

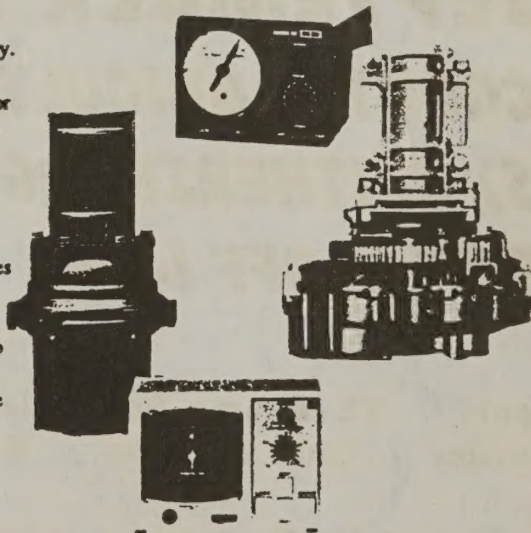
CREATE is serious about long term reliability. The CREATE RCS series rotators were designed with the serious DX'er in mind. Three models for medium, large and ultra large antenna arrays are available.

ROTOR FEATURES OF RCS SERIES

- * Large strong reduction gear system provides long term reliability during years of rugged operation.
- * Worm drive gearing provides powerful braking force and low backlash to keep your antenna in position during severe weather conditions.
- * Cast and machined aluminum case provide the strength required for long lasting service.
- * Mast clamp guides for ease of mast installation.

CONTROLLER FEATURES OF RCS SERIES

- * Speed control using silicon control rectifiers allows slow speed without reduction in rotation torque. Rotating speed is constant 60 to 200 seconds per 360 degrees.
- * Reverse delay control (RDC). Delays reverse command to rotor until antenna is at rest. Prevents damage to rotor antenna and tower system.
- * Circular dial indicator, for quick accurate reading of antenna direction. Great circle overlay available for USA (west-cent-east).
- * Preset (on 3 models) a must for quick setting of antenna direction. Just turn the knob to the new heading, the rest is automatic. Won't waste your time holding down the brake lever and wait.



EMOTO ROTATORS

More than 60% of all Japan amateurs use EMOTO rotators. Many unique innovations and international patents have made EMOTO number one.

EMOTO has a fool proof method to calculate which of their rotators will satisfy your needs. This GD² formula considers your antenna (s) weight, boom and longest element length. The EMOTO sheet is in metric so one must convert weight 2.2lbs= 1kg and length in meters 3.3ft=1 meter. Calculate your GD² then compare EMOTO GD² spec above.

$$GD^2 = W \times \frac{L^2 + B^2}{12}$$

Where: W: weight of antenna (kg)
L: length of longest element (m)
B: length of boom(m)

GD² EXAMPLES: Kgm²

TH7DX (437), TH3JR (63), 205BA (675), DISC7-3 (1300), A3S (61), A4S (173), KLM KT34XA (378), 3 ELE TRIBAND (150), 6 ELE TRIBAND (400), 20M 5 ELE (750), 15M 6 ELE (650), 40M 2 ELE SHORT BOOM (240), 40M 2 ELE FULL BOOM (800), 80M 2 ELE (1500), STACK ARRAYS 10M 5 ELE (60), 15M 5 ELE (200), 20M 5 ELE (750), 60+200+750=1010

EMOTO also has a robust AZ-EL rotator that has computer I/O ports. For those working satellites or EME moon bounce the EV700D5X should do the job, as rotating torque is more than double the YAESU G5400B AZ-EL.

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| AMSAT - Radio Amateur Satellite Corporation | Montgomery Auxiliary Communications Service |
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| Antietam Radio Association, Inc. | Mount Vernon Amateur Radio Club |
| ARINC Amateur Radio Club | National Capitol DX Association |
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| Baltimore Amateur Radio Club | North Point FM Association |
| Baltimore Radio Amateur Television Society | Northern Virginia FM Association |
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| Frederick Amateur Radio Club | Del-Mar-VA Chapter #150 |
| Frederick Amateur Repeater Group | Shenandoah Valley Chapter #137 |
| Friendship Amateur Radio Club | Vic Clark Chapter #91 |
| Goddard Amateur Radio Club | Washington Chapter #23 |
| Green Mountain Repeater Association | Rock Creek Amateur Radio Association |
| Herndon Repeater Group | St. Mary's County Amateur Radio Association |
| IBM Amateur Radio Club | Shenandoah Valley Amateur Radio Club |
| Johns Hopkins University APL ARC | Southern Maryland Amateur Radio Club |
| Laurel Amateur Radio Club | Southern Patuxent Amateur Radio Club |
| Leisure World Amateur Radio Club | Springfield Estates Elementary School-ARC |
| Loudoun Amateur Radio Group | Stafford Amateur Radio Assn. |
| MD/DC MARS (Navy Marine) Association | Sterling Park Amateur Radio Club |
| MADRAS | Summit Amateur Radio Association |
| Maryland Emergency Phone Net | Tri-County Amateur Radio Club |
| Maryland FM Association | T-MARC, Middle Atlantic Repeater Council |
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| Mercury Amateur Radio Assn., NE Area | Voice of America Amateur Radio Club |
| Metropolitan Communications Network | Washington Adventist Amateur Radio Assn. |
| | Washington Area Young Ladies ARC |
| | Woodbridge Wireless, Inc. |

AUTO-CALL

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COMING EVENTS

Aug. 7	Mid-Atlantic ARC, Warrington, PA
Aug. 7	Southern Patuxent, Upper Marlboro, MD
Aug. 14	Delaware-Lehigh ARC, Easton, PA
Aug. 14	Summit ARA, Westminster, MD
Aug. 27	PROS, Chaffee, NY
Aug. 28	Gloucester Co. ARA, Mullica Hill, NJ
Aug. 28	Tri-State ARC, Matamoras, PA
Sept. 10	Radio Assn of Erie, Erie, PA
Sept. 11	Butler Co, ARA, Butler, PA
Sept. 11	FARFEST'94, Gaithersburg, MD
Sept. 17	Buffalo Hamfest, Buffalo, NY
Sept. 18	S. Jersey Radio Assn., Pennsauken, NJ
Sept. 24-25	York, PA
Oct. 15	Radio Amateurs Greater Syracuse, Syracuse, NY
Oct. 16	CARA Hamfest, Howard County Fairgrounds
Oct. 23	R.F. Hill ARC, Sellersville, PA
Oct. 30	Mason-Dixon, Westminster, MD

CONVENTIONS & CONFERENCES

- Aug 6 Traffic Handlers Picnic, Old Forge, NY (Contact K2KIR or W2MTA for Info.)
Sept. 24 Central Atlantic ATV Network Conference, Dover, PA
Oct. 1 Mid-Atlantic VHF Conference, Horsham, PA

F.A.R.FEST 1994

SUNDAY, SEPTEMBER 11, 1994

Montgomery County Agricultural Center
(Fairgrounds) Gaithersburg, Maryland

Thanks to Hugh Turnbull - W3ABC and Bob Milligan - KI4MB for providing much of the information above. Please send a copy of your Hamfest Flyer and Information to Auto-Call and keep us advised of any changes. We are anxious to provide our readers with timely information and help to avoid possible conflicts when scheduling activities.

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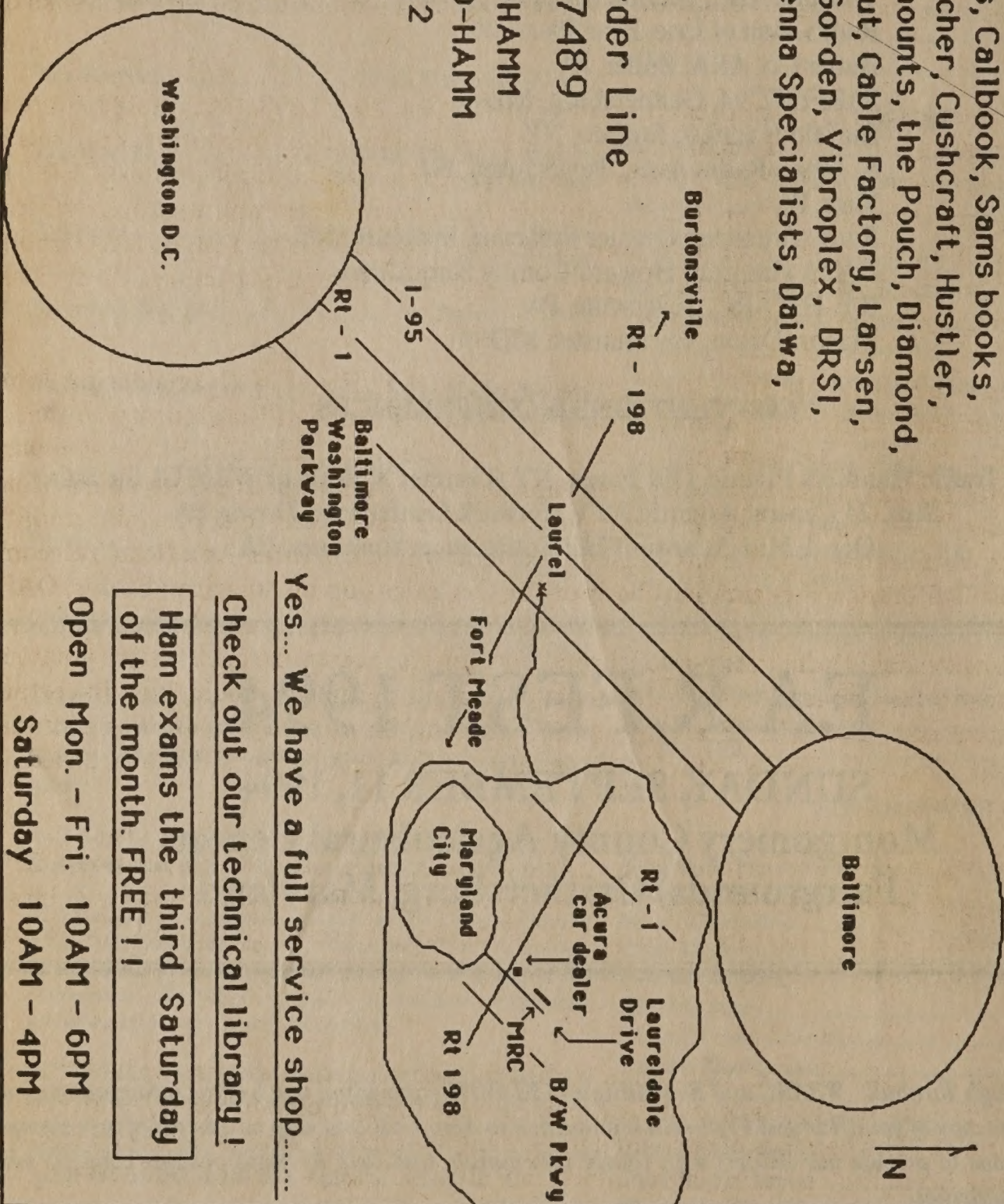
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FCC HIGHLIGHTS

By Jack Kelleher, W4ZC

Reciprocal Operating Agreements

The CQ 1994 Amateur Radio Almanac lists 77 countries with which the United States has reciprocal licensing agreements. This means that U.S. amateurs can obtain an operating permit in one of these countries without taking a written examination and with a minimum of paperwork. Detailed requirements vary from country to country. Some allow same-day reciprocal licensing, while others require waiting periods which may be weeks or months.

There is an article on reciprocal licensing in QST for May 1993. It is noted therein that amateurs from many European countries can operate in other European countries if they have a special form of "CEPT license" issued by their own administration (CEPT is the French acronym for Conference of European Posts and Telecommunications which, among other things, coordinates telecommunications operations and plans throughout Europe). The CEPT arrangement is based on a two class license structure: Class 1 requires telegraphy skill; Class 2 does not.

The lead article in the W5YI Report for June 15, 1994 is titled "FCC considering Joint CEPT Agreement - Reciprocal operating privileges with European Community could result." And in the July 1st issue of the Report John Johnston, Chief of FCC's Personal Radio Branch, is reported to have said, at the annual VEC Conference at Gettysburg, that the adoption of CEPT and CITEL international licensing could lead to a possible simplification of our own license structure. (CITEL is the acronym of the Inter-American Telecommunications Conference, a permanent body of the Organization of American States, OAS)

Mr. Johnston said that twenty-two European countries recognize each others amateur license for temporary operation in their country. A similar situation could exist in certain North, Central and South American countries. The CITEL approach is an international Amateur Radio Permit modeled after the international Driver's Permit. It is also based on a two-class system

The CEPT agreement, with revisions made in 1992, makes it possible for non-CEPT countries to participate in the licensing system, and two non-European countries -- Israel and New Zealand -- have done so. It is our understanding, however, that non-CEPT countries who subscribe to the system do not thereby agree to reciprocity with each other.

Your editor's information from an authoritative source indicates that while U.S. representatives are discussing the possibilities with their foreign counterparts, no decisions have been made. The benefits of such an agreement are already available, in principle, in the reciprocal licensing/operating agreements which the U.S. has with all but seven of the countries involved. (see the CQ Almanac list referred to earlier).

Continued on next page

HF Digital Communications

The FCC issued, on June 23, 1994, a Notice of Proposed Rule Making (Docket 94-59) proposing to amend the amateur service rules to authorize automatic control of stations transmitting a digital emission at HF. The deadline for comments is October 1, 1994. Reply comments are due November 1, 1994.

This is the latest and probably the final action on a question which was raised in 1986, when automatic control of amateur stations transmitting digital communications on VHF and higher frequency bands was authorized. At that time the Commission indicated an interest in also authorizing automatic control of amateur stations transmitting digital communications in the HF band. The Commission also noted, in that regard, that a feasibility study planned by the ARRL would be helpful in determining if any rule changes were necessary to prevent interference to and from other amateur service communication (in the event that automatic control was authorized at HF).

The ARRL study was conducted using actual transmission experiments, under Special Temporary Authority (STA) which was first granted in July 1987 and was extended several times, with a final expiration date of February 3, 1993. On February 1, 1993 the ARRL requested that the FCC grant a final extension of the STA, and at the same time filed a petition for rule-making to establish permanent rules governing automatic control of MF and HF data operation in the amateur radio service (RM-8218). A separate petition (RM-8280) was filed in June 1993 by the American Digital Society Inc. whose members are all amateur radio operators. The subject Notice of Proposed Rule Making is in response to these two petitions.

The Rule changes proposed by the Commission are:

1. Paragraphs (d) and (e) of Section 97.109, Station Control are revised to read as follows:

“(d) When a station is being automatically controlled, the control operator need not be at the control point. Only stations specifically designated elsewhere in this Part may be automatically controlled. Automatic control must cease upon notification by an EIC that the station is transmitting improperly or causing harmful interference to other stations. Automatic control must not be resumed without prior approval of the EIC.

“(e) No station may be automatically controlled while transmitting third party communications, except a station transmitting a RTTY or data transmission. All messages that are retransmitted must originate at a station that is being locally or remotely controlled.”

2. Subpart C of Part 97 is amended by adding new Section 97.221, to read as follows:

Continued on next page

“97.221 Automatically controlled digital station.

“(a) This rule section does not apply to an auxiliary station, a beacon station, a repeater station, an earth station, a space station, or space telecommand station.

“(b) A station may be automatically controlled while transmitting RTTY or data emissions on the 6 meter or shorter wavelength bands, and on the 28.120 - 28.189 MHz, 24.925 - 24.930 MHz, 21.090 - 21.100 MHz, 18.105 - 18.110 MHz, 14.0950 - 14.0995 MHz, 14.1005 - 14.112 MHz, 10.140 - 10.150 MHz, 7.100 - 7.105 MHz, or 3.620 - 3.635 MHz segments.

“(c) A station may be automatically controlled while transmitting a RTTY or data emission on any other frequency authorized for such emission types provided that:

(1) The station is responding to interrogation by a station under local or remote control, and

“(2) No transmission from the automatically controlled station occupies a bandwidth of more than 500 Hz.”

Packet Message Forwarding Rules

Our June 1994 column covered the amendment by the FCC of its Rules (Report and Order, Docket 93-85) to enable packet message forwarding systems to operate while retaining safeguards to prevent misuse. Inquiries to the FCC since this decision was released indicated that there was a misunderstanding about this rule change. The inquiries generally asked if the Commission's decision authorized automatic control of amateur stations transmitting RTTY or data emissions below 50 MHz.

On June 2 the Commission issued a news bulletin emphasizing that Section 97.109(d) limited automatic control to stations transmitting RTTY or digital emissions on amateur service frequencies above 50 MHz. (The subsequent action on RM-8218 and RM-8280, described in the item above, proposes to remove this limitation).

Still more on RFI to telephones

The “bullet proof” telephones mentioned in our previous coverage of the telephone RFI survey by FCC's Field Operations Bureau were the Western Electric/AT&T Desk Model available from Pro Distributors of Lubbock, Texas and the TPXL-D Desk Model available from TCE Laboratories Inc. of Canyon Lake, Texas. Both telephones were designed and built by companies owned by ham operators, and both firms initially got in the business to relieve amateurs from telephone RFI complaints. Much more information on the background of these two firms and their owners appears in the W5YI Report for June 15th; it is much too lengthy to reproduce here.

Continued on next page

License fees

The FCC issued a Report and Order on June 8th covering Regulatory and Application Fees. The Commission is exempting amateur radio operators from Regulatory Fees, but says further: "However, Congress included in the Schedule of Fees an annual regulatory fee covering vanity call signs . . . if our proposal to issue vanity call signs is adopted, we will assess a Regulatory Fee' (\$70) 'in FY-1994 upon persons filing applications..."

"The first 10-year fee must be paid at the time a request for a vanity call sign is made. If a vanity call-sign is not available or otherwise cannot be issued to the requestor, the regulatory fee will be refunded since amateurs are expressly exempt under the statute from regulatory fees, unless they have received their vanity call-sign."

"The American Radio Relay League Inc., asserts that it has requested Congress to change the vanity call sign annual regulatory fee to a one time application fee. We, of course, will modify our fee schedule to be consistent with any congressional amendment of the fees."

Slow Code

This is the title of an article by Bill Pasternak, WA6ITF, in Westlink Report for June 6, viz:

"Slow-code, the name given to an Amateur Radio Industry Association proposal to lower the General Class code speed requirement to 10 words per minute, has so far gained far more support than criticism in ham radio circles. Most of the packet radio postings on slow-code have praised the industry group's leadership in this area. Some even say that the proposed lowering of the code speed does not go anywhere far enough with five words per minute being suggested instead.

"Hams who favor the 5 wpm Morse Code say that this will allow some 60-70,000 Technician Class operators, licensed prior to the Novice Enhancement action of the mid 1980's, to buy high frequency radios and immediately go on the air. This is because any Tech licensed prior to Novice Enhancement has already passed the General Class theory test and a 5 wpm code exam.

"A five word per minute General Class code speed would also stimulate the sagging ham radio support industry and, some say, the nation's economy. One industry member has calculated that it could conceivably generate an instant \$60-100-million in sales of transceivers, antennas and associated equipment. With the continually shrinking dollar-to-yen exchange ratio, slow-code, it is theorized, might even stimulate the creation of new ham radio manufacturing plants here in the United States and create thousands of new jobs.

Continued on next page

"Slow-code is also getting support from users of various public bulletin boards. An unofficial poll being conducted on America Online by Newsline is so far five-to-one in favor of the Amateur Radio Industry Association's slow-code proposal.

"The Industry Association has not announced any firm date when it plans to file its slow-code rule making request before the FCC. And at press time, there has not been any reaction to this proposal from either the American Radio Relay League or the National Amateur Radio Association. Tnx Newsline."

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AMERICAN RADIO RELAY LEAGUE REPORT

by John Swafford, W4HU

This ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.

Cubans, Americans in joint contest operation.

by Joe Lynch, N6CL

What is probably the first ever joint Cuba-USA operation took place on Cuban soil between June 2 and 9, 1994, with participation in the ARRL June VHF QSO Party. Packaged with this were a few VHF-and-above firsts, including the first-ever Cuban 222 MHz and 1296 MHz contacts, both of which were with the US. In addition, the first DX "rover" operation was conducted during the contest.

Operators from the US included Lauren Libby, KX0O; Joe Lynch, N6CL; Chip Margelli, K7JA; and Janet Margelli, WA7WMB. In Cuba, they traveled to Bellomonte, a site overlooking a tourist area about 15 miles east of Havana.

There they teamed up with a group of Cuban hams that included Oscar Morales, CO2OJ; Piro Pirole, CO2PL; Pedro Hernandez, CO2KG; Jose Amador, CO2JA; Mario Rodriguez, CO2YY; and Arne Coro, CO2KK, to operate CO0FRC as a multiop entry and CO2OJ/rover during the contest.

Before the contest the US operators worked the HF bands, using their stateside call/CO2. Several hundred contacts were made, principally by Janet, who became the group's unofficial marketing director by announcing the VHF operating frequencies often during her HF contacts.

Owing to (1) an American saying that "It is better to ask for forgiveness than to ask for permission," and (2) enough extra equipment, the author convinced his friend Oscar Morales to have a go at a "rover" operation. While following my advice not to seek additional permission for operations from the first two grid locators, the Cubans thought it might not be wise for an American to be seen traveling through the streets of Havana in the back seat of a van, wearing headphones!

So, subsequent permission was sought and received while the group was on its way to the third grid locator.

Encouraged by all this, two other special stations were activated: CO0BGG (operated by CO2JA, CO2PX, CM3CD, and CM2WZ) entered the limited multiop category. CO0EGZ, operated by Leo, CM3ZD, entered the single band QRP category by running an 8 watt battery-powered radio into a three-element beam on 6 meters. Additionally, some six other Cuban amateurs activated their 6-meter stations.

Continued on next page

To go along with the ARRL contest, the Federacion de Radioaficionados de Cuba (FRC), the national amateur radio organization, sponsored a national 2-meter QSOs for the CO0FRC, and CO2OJ/rover operations.

Many stateside stations remarked that they had never heard so many Cuban stations on the air during a contest.

Highlights for the CO0FRC operation include contacts with Ott Fiebel, W4WSR, and John Meleski, KQ4PI, for the first two Cuba-US (and the first ever Cuban) contacts on 1296 MHz, and a QSO with Charles Barber, WA4CHA, for the first Cuba-US 222 MHz contact. Additionally, a contact with Dave Blaschke, W5UN, provided CO0FRC with an EME QSO on 2 meters

Unofficial tallies for the different stations are: CO0FRC, 34.4k; CO2OJ(rover) 14.5k; and CO0EGZ, 5.3k.

Peter I Operator Pleads Guilty to Bank Fraud.

Robert Wilber, N4GCK, one of the operators on last February's Dxpedition to Peter I Island (3Y0PI), has pleaded guilty to bank fraud and mail theft, according to a report in the Ann Arbor News.

Under a plea agreement he will receive 24 to 37 months in federal prison and be subject to three to five years of federal supervision following his release.

The paper said Wilber took checks totaling some \$113,000 from the mail-box of a University of Michigan professor and cashed them. He was photographed at an automatic teller machine and his photo appeared in the paper on December 20, 1993. At that time "he knew he was caught," the News said.

Wilber, 35, of Ypsilanti, Michigan, avoided arrest long enough to join the expedition to Peter I. He surrendered upon his return, having spent all the stolen money, the News said.

Another participant in the expedition was astounded at the news. "We had no idea," he said. "But Bob was very quiet under close quarters and it was obvious to all of us that something was troubling him."

Bio-Effects Committee resigns in dispute.

The members of the ARRL's volunteer Bio-Effects Committee have resigned in a disagreement with the Board of Directors over the League's position on an FCC proposal to tighten its guidelines for evaluating the possible dangers of RF radiation.

Continued on next page

ARRL President George Wilson III, W4OYI, said it seemed the committee members "couldn't get along" and called their reasons for resignation "insubstantial."

The committee members were appointed in January 1990, with the charge of "revitalizing organized Amateur Radio's concern for the limitation of potential bio-effects hazards that might arise from Amateur Radio Activities." Since then the committee worked, with Headquarters staff, to rewrite information on bio-effects appearing in League publications. The Board liaison to the committee was ARRL Southwestern Division Vice Director Wayne Overbeck, N6NB, who presented the committee chairman's reports to the board at each meeting (as summarized in the minutes of each meeting).

When Overbeck left the position of vice director in January 1992 he was appointed a member of the committee.

In early 1993 the FCC issued a Notice of Proposed Rule Making to change its guidelines for exposure to RF, to reflect those adopted in 1992 by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronic Engineers (IEEE). The Commission said that the proposed new guidelines would set two "tiers" of exposure level, one for "controlled" environments and another, generally more restrictive, for "uncontrolled" environments.

The Commission also said the new guidelines would more strictly limit automatic exclusions for low power devices, such as hand-held transceivers and telephones (the earlier guidelines, set in 1982, generally excluded hand-helds of 7 watts or less).

While the proceeding was open for public comment, the committee provided no report to the Board as it had done in the past. At its October 30, 1993 meeting, the ARRL Executive Committee adopted the strategy to be followed in the ARRL comments, and instructed the General Counsel to draft comments along those lines. On November 9, some thoughts developed by several members of the committee were submitted for consideration and later were submitted directly to the FCC, independent of the ARRL filing, identifying the authors as members of the ARRL committee.

The League in its comments said that the FCC's entire proposal to change its exposure guidelines was "premature" and should have been introduced as an FCC Notice of Inquiry rather than a Notice of Proposed Rule Making.

"The Commission's handling of this proceeding," the League said, "isn't conducive to a fair determination of which RF exposure standard, if any, should replace the 1982 ANSI standard" (see QST for April 1994, p 91).

Continued on next page

Following the independent filing by members of the committee, Wayne Overbeck, who prepared and submitted the filing, was dismissed from the committee by ARRL President George Wilson III, W4OYI, who cited the group's failure to advise the League of its intention to file separately (or that it had done so), and of their use of their ARRL appointments to bolster the filing.

Wilson also noted that the independent comments did not differ a great deal from those of the League.

The remaining members of the Bio-Effects Committee resigned on June 1, 1994, saying they "plan to continue to contribute to an understanding by amateur radio operators of the issues relating to the potential bio-hazards of our activities as radio operators."

Those resigning were Ivan Shulman, MD, WC2S (chairman); W. Ross Adey, MD, K6UI; Samuel Milham, MD; David Rodman, MD, KN2M; and Thomas Rozzell, ScD, WB4ZTT.

ARRL president responds.

"On behalf of the ARRL Board of Directors, I have accepted the resignation of members of the American Radio Relay League's Bio-Effects Committee. The resignation letter drafted by former Chairman Dr Ivan Shulman on behalf of the committee speaks for itself.

"As any thoughtful person will understand, far from being unresponsive to the issue of RF safety, ARRL's fundamental commitment was first demonstrated by the unrestricted charter given the committee upon formation. It is further demonstrated by our inclusion of chapters on RF safety in our books at the earliest evidence of potential risk, even though that evidence was ambiguous.

"We have published articles by members of the committee in QST, pointing out possible risk factors from electro-

magnetic fields, we have championed the inclusion of RF safety-related questions in the FCC Amateur Radio examination test pool, and we have incorporated much of the thinking of the committee into our filings with the FCC on this issue.

"These are scarcely the actions of an organization that seeks to avoid a difficult issue.

"The real question is, why couldn't the committee get along?

"Indeed, the grounds for resignation cited in Dr Shulman's letter seem insubstantial, based on perceived slights to status or protocol rather than on differences of opinion over RF safety. Sadly, the members' action speaks less to safety than it does to a clash of egos and personalities that couldn't adjust to an organizational environment.

Continued on next page

"By definition, the members of an association try to speak with one voice. While we must never object to individuals expressing their own opinions, it is the responsibility of anyone who accepts a position on a committee serving that organization to advise the organization fully and not to pursue a personal agenda. In their attempt to advance the cause of RF safety, we hope that the former members of the committee have not inadvertently impeded it.

"We at ARRL will work to ensure that this does not, in fact, occur. We are now beginning the process of selecting responsible new members with impeccable scientific credentials, a commitment to RF safety, and the ability to work productively together, to carry on the committee's important work." --George S. Wilson III, W4OYI, President, ARRL.

BRIEFS

Murray Green, K3BEQ, Cheverly, MD. has been authorized to check QSL cards for all Worked All States Awards, including 5 bands, usually on a while you wait basis. Give him a call on (301) 773-5730.

o The ARRL DX Advisory Committee has voted 15 to 1 against reinstating Aldabra Island to the DXCC Countries List. Aldabra was once on the list and was deleted in the 1970s.

The DXAC also voted (11 to 2 with 3 abstentions) to approve call area "calling guidelines." The guidelines call on DX stations to "operate in a manner perceived to be fair and balanced to all areas, and to work portable stations in the specific call area listen(ed) for."

o Nets have until September 6, 1994, to register in the 1995-96 ARRL Net Directory. This new edition will not carry over information from previous directories, so you must send a registration card (Form FSD-85, available from HQ) to Headquarters.

o A case involving a California amateur has led some to ask "Is it legal to own equipment capable of out-of-

amateur-band operation?" The answer is yes, but it is not legal to transmit out of band, unless the communication is made in connection with the immediate safety of human life or the immediate protection of property, when no other means of communication is available.

o Expirations of the first 10-year amateur licenses, issued in 1984, continue to take their toll. In March the FCC "deleted" 3744 station licenses, while adding 3010.

o Attention 75-meter DXers: as of May 20, 1994, Japan has a new subband, from 3747 to 3754 kHz, in addition to the two existing bands at 3500 to 3575 kHz and 3791 to 3805 kHz.

NEW

"SPECIAL"

JUNE • JULY • AUGUST

OFFER ENDS AUGUST 31st

\$47.95

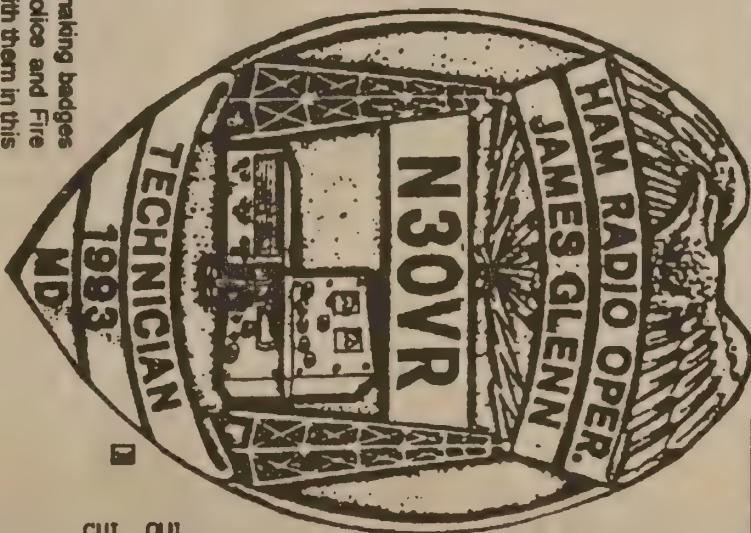
HAM RADIO OPERATORS ID BADGE

Be the first in your area to identify yourself as a HAM RADIO OPERATOR with this badge. It was originally designed as a gift for JIM GLENN, who received his HAM license in August (N30VR). Other HAMS that have seen the artists rendition wanted to buy one for themselves. West Electronics made contact with the manufacturer and the badge is now available to everyone.

We first advertised by hand bill at the August HAM FAIR in Gathersburg, Md. The response was terrific. Then we went to a direct mail approach. Again we had a great response. We covered Maryland, Virginia, and DC. When we found that over 75 HAM CLUBS in this area are members of FAR and that AUTO CALL is the official magazine for FAR, we decided to take out this ad. With it we can reach all of the local HAMS. For a limited time! until JUNE 30th we are offering our badge at the reduced price of \$47.95. This is a \$12.00 saving over the retail price of \$59.95.

The HAMS that have received their badges are very pleased with them. We have had a number of phone calls and letters. (N30YE-WA4CGU-N3EOL-W3QHQ-N8OOD-KB3ANX-NE5K) A further discount of \$3.00 will be offered on 20 or more club orders.

■ BLACKINTON & Co. Inc is the manufacturer. They have been in the business of making badges and metal ornaments since 1852. They are one of the largest suppliers in the US to Police and Fire Departments, Government, and private organizations. We are very proud to be associated with them in this venture.



ORDER NOW SAVE \$12.00

This is the actual size of the badge. It is 2 1/2 x 3 1/2 inches. The base badge is finished in a beautiful GOLD electroplate. The lettering will be blue.

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As WEST ELECTRONICS has exclusive rights to the sale of the HAM RADIO OPERATORS' badge we are offering it for a limited time at the SPECIAL price of \$47.95 with this ad ONLY. Xerox copies are acceptable. (MD residents add 5% sales tax.) Send check or money

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24K GOLD ELECTROPLATE
"STENCILING" DONE BY HAND
WILL LAST A LIFE TIME

ELECTRONIC TUNING

In the beginning, a capacitor as a device for storing electric charge, was a sheet of tinfoil on the inside surface of a glass jar opposite another sheet of tinfoil wrapped around the outside of the jar. The early designs were known as Leyden jars after the University in Germany where they were first investigated, circa 1795. Modern capacitors are the same two plates separated by a dielectric, not often glass but mica, paper, plastic, ceramic or electrolytic fluid. Fixed capacitors are components which have a designed capacitance and a working voltage which won't exceed the electric breakdown strength of the dielectric between the plates where the EMF will punch through the insulating dielectric and "short" or "blow" the capacitor.

With the discovery of resonance around 1896 where the combination of a capacitor and an inductor when used together will provide either a very high impedance (parallel resonance) or a very low impedance (series resonance), "tuning" a circuit to a specific frequency, became a practical reality. The first tuned circuits were variable inductors with tapped or sliding contacts in parallel with a fixed capacitor. Later developments in the very early 1900's had fixed coils with variable air dielectric capacitors which had multiple parallel plates mounted on a rotating shaft (the rotor) which would interleave with matching fixed plates (the stator) to vary the plate-to-plate area which determined the capacitance. For about 60 years radios were tuned almost exclusively with a mechanical variable capacitor linked to a "dial" to indicate the frequency or wavelength the circuit was tuned to.

Mechanically variable capacitors were of two designs: 1) straight line frequency, or 2) straight line wavelength. This characteristic was determined by the shape of the plates so that you could get a linear change in either frequency or wavelength per degree of rotation. This is the reason dial markings at one end of the scale were often wide apart and bunched together at the other end. To get precision tuning you used either a mechanical stepdown gear drive for slow motion or a separate small parallel "bandspread" capacitor. The old Hallicrafters, Hammurlund, National, etc. receivers had two dials to read frequency. One was a general coverage or band-set dial, and the other was the bandspread dial. When miniature radios came into vogue, the variable capacitor was a sandwich of plates and dielectric squeezed with a variable set screw. It was small, but more importantly it was inexpensive.

With the advent of the semi-conductor PN junction diode it was observed that the diode junction with a reverse bias exhibited a capacitance that was voltage dependent. In attempting to develop this characteristic, the varactor diode (or varicap) evolved. Today the varactor tunes TV channels by changing a DC bias voltage across a diode, not with any mechanical action. This made the TV remote control possible.

Varactors generally have a practical capacitance variation range of four or five to one. The old mechanical variable capacitor had a range of 10 to one or more. The Q of a junction capacitor can be as high as the air variable. The dielectric constant of the air between the plates of an air variable depends on the pressure, temperature, humidity, and particulate (dust) contamination. You can breathe air into the air variable and change the capacity because of the temperature and humidity change. High voltage variable capacitors are sometimes operated in a vacuum to prevent arc-over between the plates due to contamination of the plates or the air dielectric.

The one big difference between the air variable and the varactor is the speed with which the capacitance change can take place. A varactor can change capacitance at a Megahertz rate. This would be impossible with a mechanical system. So, now we tune with a potentiometer voltage divider, gone but not forgotten are the days of those beautiful Hammarlund dual-gang, brass plated, isolantite insulated, 140 mmf per section variables.

TRAFFIC FUN

By Geri Sweeny, N4GHI

It's vacation time! This gives you a wonderful reason to send friends and relatives a message. You first tell everyone you know where you will be going (beach, mountains, Europe), and when you get back, you let them all know what fun you had. Book traffic goes well here. Something like:

R N4GHI 14 Mt Vernon VA Aug 1
Canoed through the Great Dismal
Swamp Canal x very hot
but animal life interesting
Geri and John

You now list your message numbers with each name and address. (In the text an x is used to break phrases. Punctuation such as periods, commas, etc. is never used.

Get out your address book and send a message to five or ten friends. You might just say, "It's sure hot here x Wish I could be in " _____ " (fill in the blank). This lets them know, in a very creative way, that you are thinking of them.

But to whom will you give these messages? And could you get an answer back? Last month I mentioned a local 2 meter net which covers a wide metropolitan area. The repeater is on Blue Mount (in Northern Virginia), meets nightly at 7:30 on 147.30. This is a traffic net.

Why not dust off your key and try checking into the Virginia Slow Net (VSN) on 3680. It also meets at 7:30 each evening. It is a traffic training net. Not only will it teach traffic handling, but you will definitely increase your code speed. The net operates at 10 WPM but the Net Control Station will certainly slow down to whatever speed you choose to send when you check in. How is the training accomplished? There is a series of messages which you get a chance to copy. You send each message back to an instructor. Each message deals with some aspect of traffic handling. The net manager is Pat, N0RDQ, in Charleottesville, VA. If you would like more information from Pat, you can reach him via: 1) Internet: Pat.Wilson @ pplace.com 2) Packet: N0RDQ @ WA4TFZ 3) Phone: 804/978-4117 (home), or 977-3030 (work).

Maryland/DC also has a slow CW training net. Over the years, they have turned out some distinguished alumni. They have established training curricula for beginning traffic handling, advanced traffic handling, liaison from one net to another, becoming an instructor, and becoming a net control station. The MSN meets nightly at 7:30 on 3717 Khz.

Both these slow speed CW nets are in the Novice band and make a great way to jump into amateur radio. Using a key is great fun.

Oh, and yes... you can get a return answer. Put HXE in the preamble (this requests the delivering station to get a reply and originate a message back to you) ; and/or use ARL seven in the text. (ARL seven: Please reply by Amateur Radio through the amateur delivering this message. This is a free public service.) If you use an ARL message in the text, don't forget to put ARL before the message check number in the preamble.

MAY AND JUNE SKYWARN ACTIVITIES

In May Skywarn was activated three times; on Sunday May 15th, Wednesday May 25th and Thursday May 26th. On Wednesday May 18th Dan, KC4OCG; Bud, N0AA; Terry, N0KYZ; and myself attended the Maryland Emergency Management Agency Conference where Barbara McNaught, Skywarn Program Manager; and Jim Belville, Meteorologist in Charge at the NWS Washington Forecast Office In Starling, Va. were featured speakers. These meetings bring together the emergency managers of the many jurisdictions we serve along with the local, state and federal authorities charged with responding to any natural disaster or emergencies that might occur. We found the conference, along with the Virginia Emergency Management Agency conference that we attended in February, to be very useful in determining the needs of the various agencies as well as what Skywarn can do to help by providing timely and accurate severe weather information.

Activations during June were on: Monday June 6th, Thursday June 16th, Tuesday June 21st and Wednesday June 29th. A Spotter I class was held at Sterling on Saturday June 11th. It was a pleasant surprise when I asked for a show of hands of those that were licensed or were working towards an Amateur Radio license. Out of a class of more than 25 people, only two students had no interest in becoming hams.

During June the Doppler radar in Sterling was commissioned and the dedication was attended by officials from around the region along with representatives of the National Weather Service and Skywarn Volunteers.

The Skywarn Spotter picnic was held at Sterling on Saturday June 25th. There was plenty of food and a good time was had by all. It was nice to finally meet many of the volunteers after working with some of them for the least two years.

As most of you know from Dan's article on May 1st, I was appointed Skywarn Amateur Radio Coordinator by the National Weather Service. It has been a busy couple of months. I have been associated with the program for the least two years and had been working as Dan's assistant for the last year. Life was much easier being the assistant. I now understand why Dan always said he was looking forward to being an "ex chief". There is a lot to learn on this job. I would like to thank all those whose patience and understanding have made the transition easier. Special thanks to Dan for his commitment to the program and for all the time he continues to make available, to the remote net control stations, Mary Ann, N8ODZ; Roy, KC4YGB; Bud, N0AA; Terry, N0KYZ; Bob, KA3ZCI. To the management teams who are always ready to come out to Sterling to help out: Tom, K4FHK; Ross, N4YYH; David, KD4TWR; Danny, KE4DXA; Donna, KE4FYM; Rusty, KD4WLZ; Dan, KC4OCG; Bernie, KC4YHP; and all the other volunteers who give their time when it would be so much easier to stay home and let "someone else" do it. Also our thanks go out to the remote nets and all the spotters without whose efforts this program would not be successful.

Unfortunately space is limited and we are unable to list everyone individually so in closing let me say thank you to all the Participants, We are grateful for your help in the past and all the time you continue to contribute to make the program successful. Anyone who would like information on the program or wants to participate is welcome to give me a call at (703) 729-4711,

Jorge, KD4DGQ

DX DX DX
By John Kanode, N4MM

DXCC COUNTRY LIST CHANGES SINCE 1987

The DXCC Country List is always changing. World events cause most of it but other factors enter into the changes. Below is a list of changes since 1987.

January 1987	3Y	Peter I Island added 1/25/87
April 1988	P4	Aruba added 1/1/86
April 1988	S0	Western Sahara moved from deleted to active
May 1989	4J1	Malyj Vysotskij Island added
May 1989	3D2	Rotuma added
May 1990	3D2	Conway Reef added
May 1990	T33	Banaba Island added
May 1990	ZS9	Walvis Bay added 9/1/77
March 1991	7O	Yemen added 5/22/90
March 1991	Y2	East Germany deleted 10/2/90
March 1991	4W	North Yemen deleted 5/21/90
March 1991	7O	South Yemen deleted 5/21/90
September 1991	ZS1	Penguin Island added
January 1993	4N4	Bosina-Hercegovina added 10/15/91
January 1993	9A	Croatia added 6/26/91
January 1993	S5	Slovenia added 6/26/91
June 1993	A1	Abu Ail deleted 3/31/91
June 1993	OK	Czechoslovakia deleted 12/31/92
June 1993	OK	Czech State added 1/1/93
June 1993	OM	Slovakia added 1/1/93 country
June 1993	4N5	Macedonia added 9/8/91
January 1994	E3	Eritrea moved from deleted to active 5/24/91
April 1994	ZS1	Penguin Island deleted 3/1/94
April 1994	ZS9	Walvis Bay deleted 3/1/94

UPCOMING DX CONTESTS

YO DX Contest	August 6-7
European DX Contest CW	August 13-14
SEANET SSB Contest	August 20-21

UPCOMING DXPEDITIONS

V31PA	Belize	Now to September 1994
XU7VK	Cambodia	Now to February 1995
TT8PS	Chad	Now to August 1994
CY9CWI	St. Paul Is.	August 12-26, 1994
FR5ZQ/G	Glorioso	July-August 1994

Continued on next page

APPROVED OPERATIONS

Call:	Operations Beginning:
3D2MD	25 June 1991
3D2/ON4QM	24 September 1990
5W1JW	9 September 1991
A35DM	8 August 1990
C56/ON4QM	30 October 1989
DP0RIM*	13 February 1993
H44QM	30 October 1991
S92QM	16 March 1992
T20CB	9 September 1992
T30MD	24 September 1992
V63SB	24 March 1994
VS6/WA6TJM	2 June 1992
XT2TX	19 November 1993
YJ0AMD	1 October 1990
ZK1DM	25 September 1991
ZK2XX	29 October 1993
ZK3DM	9 August 1993

*DP0RIM was a special agreement callsign. The operation counts for Mauritania (5T5).

TIDBITS

UA1N Karelia has been deleted from the WAE-Country List. This concerns European awards and contests (including the CQWW DX Contest). The complete WAE Country List can be found in the German magazine CQ-DL May 1994 on page 345. UN1N was deleted from the DXCC Country List June 30, 1960.

On June 24 and 25, a brief operation took place from Scarborough Reef. About 2000 QSO's were made. Only SSB was used. This area is being considered for addition to the DXCC Country List.

The DXAC voted 15 to 1 against reinstatement of (deleted) Aldabra to the DXCC Countries List. The DXAC decided that Aldabra does not meet criteria of the present rules.

The DXAC also voted to approve call area calling guidelines. There were 11 yes and 2 no votes with 3 abstains. The DXAC guidelines call on DX stations to operate in a manner perceived to be fair and balanced to all areas and to work portable stations in the specific area they are listening for.

Six meters, thought to be dead has risen from the grave. Openings to Europe, Africa, Central America and South America have appeared. Also lots of openings to the west coast have taken place. A 5T5 station has appeared on six, which is a first for this band. Some New England stations in one day worked over 200 stations in Europe.

Training Classes

Alexandria Radio Club	Rich Adamy - KA4GFY	(703)644-3920
Anne Arundel Radio Club	Tony Young - WA3YLO	(301)262-1917
Arlington Amateur Radio Club	Fred Bardsley - WD4DHW	(703)533-0372
Antietam Radio Association	Robert Long - KD3JK	(301)824-5132
Baltimore Radio Amateur TV Society	Joe Chidester - W3SHZ	(410)602-0353
Fauquier Amateur Radio Club	Neil Spokes - AB4YK	(703)364-3861
Frederick Amateur Radio Club	Steve Bauman - W3FOA	(301)662-4552
Herndon Repeater Group	Michael Weber - WB8RDN	(703)450-2304
Laurel Amateur Radio Club	Pub Weaver - W3DQI	(301)498-6293
Madras	Larry Ziecheck - N3GKS	(301)984-6112
Maryland Mobileers ARC	John Baugus - N3JME	(301)551-3161
Montgomery Amateur Radio Club	Jane Rosenthal - AA3CQ	(301)762-6262
Mount Vernon Amateur Radio Club	John Forrest - WZ4A	(703)971-3905
NASA/Goddard Amateur Radio Club	Vikki Gigante - KA3PVS	(301)249-2609
Ole Virginia Hams ARC	John Fritsch - N4YOB	(703)791-5995
Pentagon Amateur Radio Club	David Boyd - K9MX	(703)659-6241
Rock Creek Amateur Radio Assn.	Leo Boberschmidt - KA3TGY	(301)949-3954
St. Mary's County ARA		(301)862-2214
Shenandoah Valley ARC	Guy Black - W4PSJ	(703)722-4952
Southern Maryland ARC	Vic Curtis - WA3YUV	(301)888-1388
Southern Patuxent ARC	Dwayne Kincaid - WD8OYG	(301)586-2177
Springfield Estates ARC	Will Schmitt - KD4CNX	(703)768-5709
Stafford Adult Education	Jerry Mullinix - AC4HK	(703)659-3905
Sterling Park Amateur Radio Club	Mark Johnson - WS3N	(703)430-3804
Tri-County Amateur Radio Club	John Creel - WB3GXW	(301)572-5124
Vienna Wireless Society	Paul Wilkins - AB4CY	(703)560-2779
Woodbridge Wireless, Inc	Cliff Deel - KO4FM	(703)491-0841

NOVICE, TECHNICIAN ENTRY-LEVEL AMATEUR RADIO COURSE

The Mount Vernon Amateur Radio Club will present an entry level course leading to a Novice or Technician amateur radio license. The course will be held Monday evenings from 7:30 to 9:30 PM in Alexandria, Virginia beginning on September 12, 1994 and will run for about 15 weeks. Morse code instruction will be included in the course. There is no charge for the course; however, students will be expected to provide their own study materials which will cost about \$30. Contact John Forrest, WZ4A at (703)971-3905 for location and further information.

FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the
second Wednesday of each month.

Visitors are always welcome

**The next meeting will be on Aug. 10 in Takoma Park, Maryland
Columbia Union College Science Building Auditorium, Flower Avenue**

(Take beltway exit 30 South on Colesville Road to
Franklin Avenue, East on Franklin to Flower, South to the college)

Talk-in on 147.18

VOLUNTEER EXAMINER COOPERATIVE

JOHN FORREST WZ4A
6111 BURNETT ST.
ALEXANDRIA, VA, 22310
(703)971-3905

NOTICES:

* EFFECTIVE JULY 1, 1994, THE GENERAL CLASS WRITTEN EXAM QUESTION POOL (ELEMENT 3B) WILL CHANGE. EXAMS ADMINISTERED AFTER THAT DATE MUST USE THE NEW QUESTION POOL. BE SURE TO USE STUDY MATERIALS APPROPRIATE FOR THE QUESTION POOL IN USE.

SCHEDULE OF EXAMINATIONS

1994

AUGUST 6, 1994 (SATURDAY)

HERNDON, VA - HERNDON REPEATER GROUP (ARRL VEC) WALK-IN
CONTACT: MIKE WEBER WB8RDN (703)450-2304 BETWEEN 7-9 PM

AUGUST 7, 1994 (SUNDAY)

LANDOVER, MD - D.C.M. ARC (W5YI VEC) WALK-IN
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)
(301)773-2898 (EVENING)

SHENANDOAH VALLEY ARC (HAMFEST) (MOUNT. ARC VEC)
PRE-REGISTRATION DESIRABLE
CONTACT: LEO PATTERSON KQ8E (301)289-3576
GAY REMBOLD W3DFW (301)724-0674

AUGUST 13, 1994 (SATURDAY)

DAVIDSONVILLE, MD - ANNE ARUNDEL RADIO CLUB (LAUREL VEC)
WALK-IN
CONTACT: NANCY ALLEY NT3Z (410)761-7115
BOB ISRAEL WC3I (301)262-5083

ALEXANDRIA, VA - MT. VERNON ARC (LAUREL VEC) WALK-IN
CONTACT: FRANK MACKEY N4GUS (703)455-1510

CUMBERLAND, MD - MOUNTAIN ARC (MOUNT. ARC VEC) WALK-IN
CONTACT: LEO PATTERSON KQ8E (304)289-3576
GAY REMBOLD W3DFW (301)724-0674

HARRISONBURG, VA - MASSANUTTEN ARA (ARRL VEC) WALK-IN
CONTACT: MARSHALL COOPER N4ZKH (703)856-8012 (6-9PM)

AUGUST 20, 1994 (SATURDAY)

LAUREL, MD - LAUREL ARC (LAUREL VEC)

PRE-REGISTRATION DESIRABLE
CONTACT: JOHN CREEL WB3GXW (301)572-5124 AFTER 6 PM

AUGUST 30, 1994 (TUESDAY)

ANNAPOLIS, MD - MARYLAND MOBILEERS ARC (LAUREL VEC)
PRE-REGISTRATION REQUESTED - LIMITED WALK-INS
CONTACT: LOIS TURNER KA3VVQ (410)647-4178

SEPTEMBER 4, 1994 (SUNDAY)

LANDOVER, MD - D.C.M. ARC (ARRL VEC) WALK-IN
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)
(301)773-2898 (EVENING)

ELKINS, WVA (MOUNT. ARC VEC) WALK-IN
CONTACT: (304)637-0506

SEPTEMBER 10, 1994 (SATURDAY)

DAVIDSONVILLE, MD - ANNE ARUNDEL RADIO CLUB (LAUREL VEC)
WALK-IN
CONTACT: NANCY ALLEY NT3Z (410)761-7115
BOB ISRAEL WC3I (301)262-5083

ALEXANDRIA, VA - MT. VERNON ARC (LAUREL VEC) WALK-IN
CONTACT: FRANK MACKEY N4GUS (703)455-1510

CULPEPER, VA (ARRL VEC) PRE-REGISTRATION PREFERRED
CONTACT: BILL BROWN AC4KP (703)547-3089
GARY W0QDP (703)854-6187

SEPTEMBER 14, 1994 (WEDNESDAY)

GLEN BURNIE, MD - MARYLAND MOBILEERS ARC (LAUREL VEC)
PRE-REGISTRATION REQUESTED - LIMITED WALK-INS
CONTACT: JERRY GAVIN NU3D (410)761-1423

SEPTEMBER 17, 1994 (SATURDAY)

LAUREL, MD - LAUREL ARC (LAUREL VEC)
PRE-REGISTRATION DESIRABLE
CONTACT: JOHN CREEL WB3GXW (301)572-5124 AFTER 6 PM

SEPTEMBER 18, 1994 (SUNDAY)

VIRGINIA BEACH, VA - SOUTHERN PENINSULA AMATEUR RADIO KLUB
(VEC UNKNOWN) WALK-IN
CONTACT: ED BRUMMER W4RTZ (804)898-8031

SEPTEMBER 24, 1994 (SATURDAY)

GLOUCESTER, VA - GLOUCESTER RADIO AMATEUR COLLEGE OF
EXAMINERS (W5YI VEC) PRE-REGISTRATION DESIRABLE
CONTACT: FRAN STERLING KD4UEY (804)693-2117

OCTOBER 1, 1994 (SATURDAY)

WILLIAMSBURG, VA - WILLIAMSBURG ARC (ARRL VEC)
WALK-IN
CONTACT: ANDREW SWANSON WJ4X (804)253-2811

OCTOBER 2, 1994 (SUNDAY)

LANDOVER, MD - D.C.M. ARC (W5YI VEC) WALK-IN
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)
(301)773-2898 (EVENING)

OCTOBER 8, 1994 (SATURDAY)

DAVIDSONVILLE, MD - ANNE ARUNDEL RADIO CLUB (LAUREL VEC)
WALK-IN
CONTACT: NANCY ALLEY NT3Z (410)761-7115
BOB ISRAEL WC3I (301)262-5083

ALEXANDRIA, VA - MT. VERNON ARC (LAUREL VEC) WALK-IN
CONTACT: FRANK MACKEY N4GUS (703)455-1510

CUMBERLAND, MD - MOUNTAIN ARC (MOUNT. ARC VEC) WALK-IN
CONTACT: LEO PATTERSON KQ8E (304)289-3576
GAY REMBOLD W3DFW (301)724-0674

HARRISONBURG, VA - MASSANUTTEN ARA (ARRL VEC) WALK-IN
CONTACT: MARSHALL COOPER N4ZKH (703)856-8012 (6-9PM)

OCTOBER 15, 1994 (SATURDAY)

LAUREL, MD - LAUREL ARC (LAUREL VEC)
PRE-REGISTRATION DESIRABLE
CONTACT: JOHN CREEL WB3GXW (301)572-5124 AFTER 6 PM

OCTOBER 25, 1994 (TUESDAY)

ANNAPOLIS, MD - MARYLAND MOBILEERS ARC (LAUREL VEC)
PRE-REGISTRATION REQUESTED - LIMITED WALK-INS
CONTACT: LOIS TURNER KA3VVQ (410)647-4178

OCTOBER 23, 1994 (SUNDAY)

HAGERSTOWN, MD - ANTIETAM RADIO ASSN ARC (ARRL VEC)
PRE-REGISTRATION REQUESTED
CONTACT: PAGE PYNE WA3EOP (301)714-0688 (DAY)
BOB LONG KD3JK (301)824-5132 (EVENING)

NOVEMBER 5, 1994 (SATURDAY)

PORTSMOUTH, VA - PORTSMOUTH ARC (ARRL VEC)
PRE-REGISTRATION DESIRABLE
CONTACT: ART THIEMENS AA4AT (804)484-2857

NOVEMBER 6, 1994 (SUNDAY)

LANDOVER, MD - D.C.M. ARC (ARRL VEC) WALK-IN
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)
(301)773-2898 (EVENING)

ELKINS, WVA (MOUNT. ARC VEC) WALK-IN
CONTACT: (304)637-0506

NOVEMBER 12, 1994 (SATURDAY)

DAVIDSONVILLE, MD - ANNE ARUNDEL RADIO CLUB (LAUREL VEC)
WALK-IN
CONTACT: NANCY ALLEY NT3Z (410)761-7115
BOB ISRAEL WC3I (301)262-5083

ALEXANDRIA, VA - MT. VERNON ARC (LAUREL VEC) WALK-IN
CONTACT: FRANK MACKEY N4GUS (703)455-1510

CULPEPER, VA (ARRL VEC) PRE-REGISTRATION PREFERRED
CONTACT: BILL BROWN AC4KP (703)547-3089
GARY W0QDP (703)854-6187

NOVEMBER 19, 1994 (SATURDAY)

LAUREL, MD - LAUREL ARC (LAUREL VEC)
PRE-REGISTRATION DESIRABLE
CONTACT: JOHN CREEL WB3GXW (301)572-5124 AFTER 6 PM

HERNDON, VA - HERNDON REPEATER GROUP (ARRL VEC) WALK-IN
CONTACT: MIKE WEBER WB8RDN (703)450-2304 BETWEEN 7-9 PM

NOVEMBER 23, 1994 (WEDNESDAY)

GLEN BURNIE, MD - MARYLAND MOBILEERS ARC (LAUREL VEC)
PRE-REGISTRATION REQUESTED - LIMITED WALK-INS
CONTACT: JERRY GAVIN NU3D (410)761-1423

DECEMBER 3, 1994 (SATURDAY)

VIRGINIA BEACH, VA - VA BEACH ARC (ARRL VEC)
PRE-REGISTRATION DESIRABLE
CONTACT: JUDY ROGERS KD4JMA (804)468-9166

DECEMBER 4, 1994 (SUNDAY)

LANDOVER, MD - D.C.M. ARC (W5YI VEC) WALK-IN
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)
(301)773-2898 (EVENING)

DECEMBER 10, 1994 (SATURDAY)

DAVIDSONVILLE, MD - ANNE ARUNDEL RADIO CLUB (LAUREL VEC)
WALK-IN
CONTACT: NANCY ALLEY NT3Z (410)761-7115
BOB ISRAEL WC3I (301)262-5083

ALEXANDRIA, VA - MT. VERNON ARC (LAUREL VEC) WALK-IN

CONTACT: FRANK MACKEY N4GUS (703)455-1510

CUMBERLAND, MD - MOUNTAIN ARC (MOUNT. ARC VEC) WALK-IN
CONTACT: LEO PATTERSON KQ8E (304)289-3576
GAY REMBOLD W3DFW (301)724-0674

HARRISONBURG, VA - MASSANUTTEN ARA (ARRL VEC) WALK-IN
CONTACT: MARSHALL COOPER N4ZKH (703)856-8012 (6-9PM)

EXAM FEES:

- * CHECK FOR APPROPRIATE EXAM FEE. FEES AND MODES OF PAYMENT FOR INDIVIDUAL VECs AND EXAM TEAMS MAY VARY.
- * ARRL VEC EXAMS COST \$5.75
- * LAUREL VEC EXAMS ARE FREE
- * MOUNTAIN VEC EXAMS ARE FREE
- * W5YI VEC EXAMS COST \$5.75

BRING TO EXAM:

- * PICTURE IDENTIFICATION
- * COMPLETED FCC FORM 610 (MOST VE TEAMS WILL SUPPLY AT EXAM)
- * ORIGINAL AND A COPY OF CURRENT FCC AMATEUR RADIO LICENSE
- * ORIGINALS AND COPIES OF ALL ACTIVE CERTIFICATES OF SUCCESSFUL COMPLETION OF PRIOR EXAMS
- * EXAM FEE (CHECK OR CASH DEPENDING ON VE TEAM)

"GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):

- * IF YOU PRESENTLY HOLD A TECHNICIAN CLASS LICENSE WHICH WAS FIRST ISSUED PRIOR TO MARCH 21, 1987, YOU MAY BE GRANDFATHERED FOR ELEMENT 3B (GENERAL CLASS WRITTEN EXAM) BY PRESENTING THE ORIGINAL AND A COPY OF THE LICENSE DATED PRIOR TO MARCH 21, 1987 TO THE VE TEAM. IT IS YOUR RESPONSIBILITY TO PROVE THAT YOU ARE ENTITLED TO GRANDFATHERING. DO NOT LOSE YOUR ORIGINAL LICENSE!

RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:

1. ALL SUBMISSIONS MUST BE IN WRITING
2. DATE AND DAY OF WEEK MUST BE SPECIFIED FOR EACH EXAM DATE
3. POINT OF CONTACT AND PHONE NUMBER MUST BE SPECIFIED
4. SPONSOR AND LOCATION MUST BE SPECIFIED
5. VEC MUST BE SPECIFIED
6. EXAM DATES UP TO 12 MONTHS IN ADVANCE WILL BE ACCEPTED

The Summit Amateur Radio Association
Presents

THE 1994 CARROLL COUNTY COMPUTER AND HAMFEST

Sunday August 14, 1994
at the Carroll County Agricultural Center
At the end of Smith Ave. Westminster, Maryland

Tailgating \$5.00 per space / All inside tables \$8.00
DONATIONS \$5.00

8000 SQ FEET OF INSIDE TABLE SPACE

Call for Information KS3L Alan Parker

(410)859-1475

Tailgating Starts at 8.00 AM

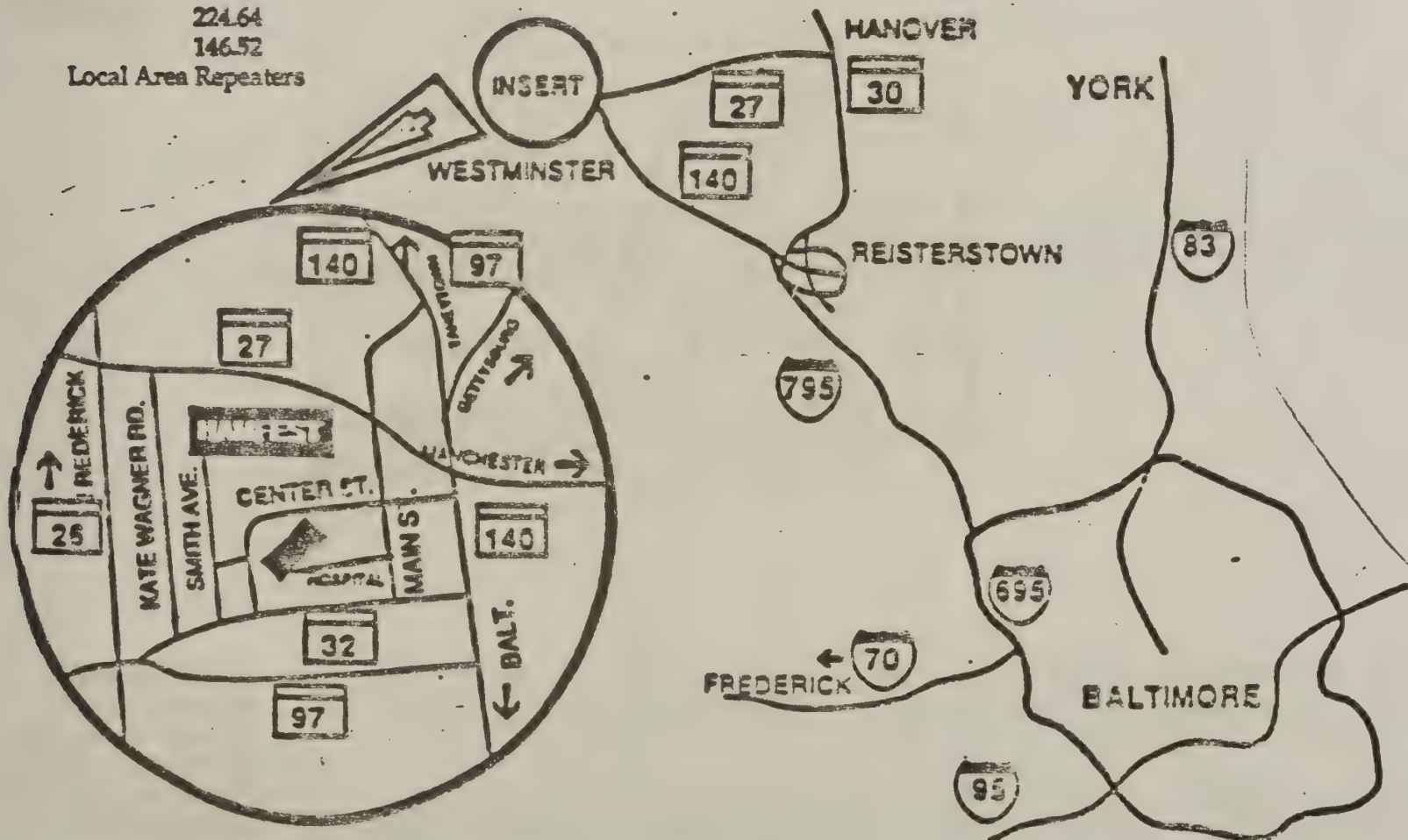
General Admission at 8.00 AM

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224.64
146.52
Local Area Repeaters

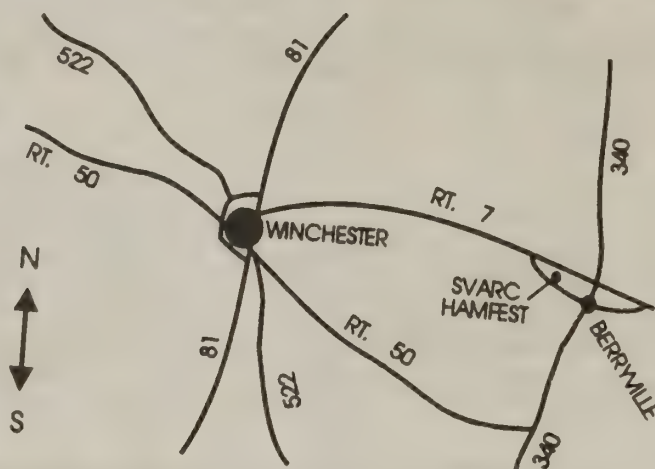


The Shenandoah Valley Amateur Radio Club Presents The **44th Annual Hamfest & Computer Show**

(Electronics Flea Market Open To The General Public)

SUNDAY, AUGUST 7th, 1994

AT THE CLARKE COUNTY RURITAN FAIRGROUNDS IN BERRYVILLE, VIRGINIA



**ARRL APPROVED
HAMFEST**

- GATE OPENS AT 6:00 AM
- GENERAL ADMISSION \$5.00
- TAIL-GATERS ADDITIONAL \$7.00 PER SPACE
- COMMERCIAL & INDOOR TABLES BY RESERVATION,
FIRST COME, FIRST SERVED
- COUNTRY HAM & EGG BREAKFAST 6 TO 10 AM
- CONCESSIONS & SNACK BAR AVAILABLE
- RURITAN'S FAMOUS CHICKEN & BEEF BARBQUE!
- VE EXAMS (SAME DAY)*
- TALK-IN 146.22-82 & 52 SIMPLEX, W4RKC
- FREE BINGO WITH PRIZES
- GRAND PRIZES AND HOURLY DRAWINGS
- COUNTY PARK WITH POOL, PICNIC AREA,
AND PLAYGROUND OPPOSITE HAMFEST SITE

Remember!
Always the first
Sunday in August.

by Rick Choy
N3HXT
Hamfest Chairman

*VE Exams 8 AM
At Cooley School
Across from Hamfest
All classes of licenses
Pre-registration requested
Limited walk-ins

For information and vendor registration and pre-reservations, call Irv Barb KD4BHV (703) 955-1745, Rt 3 Box 5385, Berryville, VA 22611
The SVARC is a non-profit, non-commercial special service organization dedicated to the furtherment of Amateur Radio communications

4th Annual



SOUTHERN PATUXENT HAMFEST

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Hamfest in
the Area!

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Approved

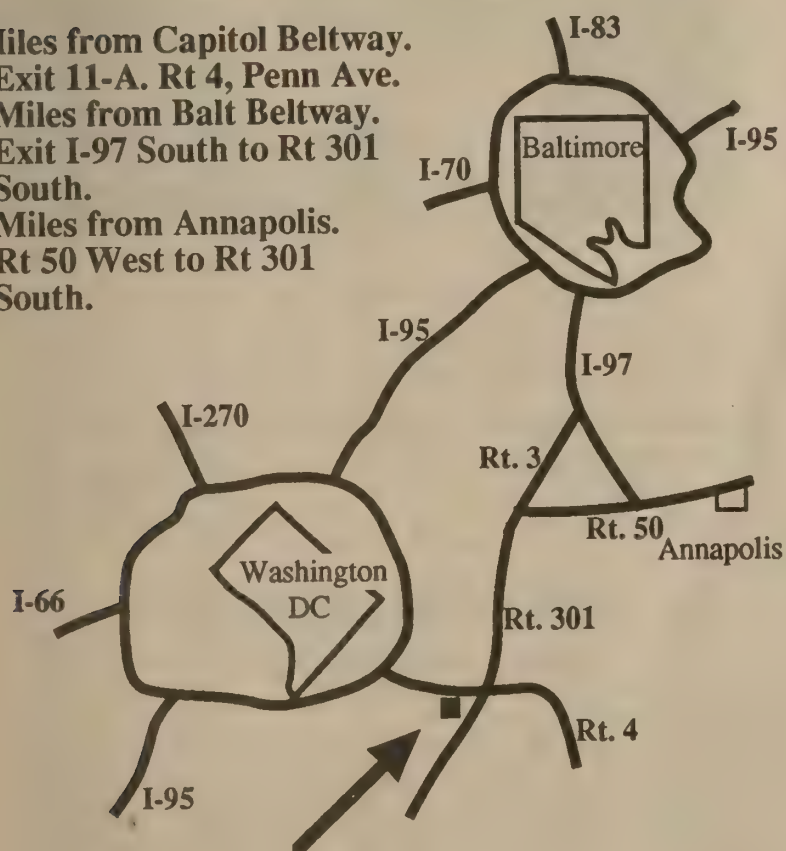
SUNDAY AUGUST 7, 1994
Upper Marlboro, Maryland



THE ♦ SHOW ♦ PLACE ♦ ARENA

Over 40,000 square feet of Air Conditioned Indoor Vendor space.

7 Miles from Capitol Beltway.
Exit 11-A. Rt 4, Penn Ave.
30 Miles from Balt Beltway.
Exit I-97 South to Rt 301
South.
20 Miles from Annapolis.
Rt 50 West to Rt 301
South.



General Admission \$5.00
Tailgate Space \$5.00
Indoor Tables \$25.00
Concourse, and main floor available.

(Tailgate or Table includes One admission)

Sunday Tailgate Setup 6 a.m.
General Admission 7 a.m.- 2 p.m.

Talk-in on: 147.15 Repeater
(Courtesy Southern Maryland ARC)

Plenty of Parking

THE ♦ SHOW ♦ PLACE ♦ ARENA



Indoor Tables by Advance Registration Only!
Send Requests to: Southern Patuxent Hamfest
PO Box 399, St. Leonard Md 20685
Call: (410) 586-2177 for Information.

QUARTER CENTURY WIRELESS ASSN BALTIMORE, MD. CHAPTER NO.20

- ✧ MONTHLY BUSINESS LUNCHEON: 3rd Thursdays, 1PM, Denny's Restaurant Padonia Rd Exit I-83
- ✧ ON THE AIR: Mondays, 21:00 LT, on 147.285 Repeater
- ✧ INFO: WA4GHU, 13902 Sunnybrook Rd Phoenix, MD 21131-1342

Friday the 13th didn't discourage the 42 Chapter members wives and guests who turned out May13 for Baltimore QCWA Chapter 20's annual dinner-business meeting at Snyder's Restaurant in suburban Arbutus, Md.

Following the cocktail hour and bountiful dinner, we were thoroughly entertained with stories, exhibits and slides from the Baltimore Street Car Museum. James Larduskey, an officer and former curator of the museum, took us back to those street car days in Baltimore, fondly remembered by those attending.

The business session presided over by Bill Gatton- W3QFF, Club President featured the presentation of the QCWA Gold Award Certificate to Lee Dorsey-N3BHC, Club Vice President, for his 70 Year anniversary of first licensing. Roland Johnson-W3WA is also eligible for the 70year Gold Certificate Award, as is Camille Marie-W3EPR and Harold Kemp-W3EEI both for 60 year awards. Their certificates had not been received in time for formal presentations at this time.

Next social event of the year will be the annual cook-out at the QTH of W3EPR early in October.

73s de Bill WA4GHU Secy.



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Help Line
8-9 PM EST
(301) 869-6436

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Anne Arundel Radio Club

- ✧ MEETINGS: 8 PM 1st and 3rd Thursdays, Davidsonville Family Recreation Center, Queen Anne Bridge & Wayson Roads off MD Rt. 214 near Annapolis.
- ✧ ON THE AIR: 2030 Thursdays when there is no club meeting on 147.705/105. Tuesdays at 2030 local time on 28.410. The Chesapeake Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15. MSN (Maryland Slow Net) every evening at 1930 on 3.7170 Mhz.
- ✧ ADDRESS: P.O. Box 308, Davidsonville, MD 21035
- ✧ INFORMATION: Margaret (Holly) Bevan, 301-923-0229

Transmission lines and antennas were the subjects of the June 18th program meeting. Club members Bill Rynone and Frank Piazza/WD6DUQ discussed transmission line construction: basic characteristics, response to pulse and sinusoidal signals and the effects of three types of line termination. Bill evolved a dipole antenna from a transmission line and described a marker beacon antenna that he designed for general aviation use. It was a most interesting and well-received presentation.

The annual AARC Family Picnic on June 18th was a great success, even though the crowd was smaller than last year. Close to seventy persons gathered in the picnic pavilion on the DFRC (Davidsonville Family Recreation Center) grounds to ragchew and enjoy the delicious salads and desserts brought by attendees to supplement the hamburgers, hot dogs, rolls and soft drinks furnished by the Club. A light breeze and tarps to extend the shade of the pavilion provided comfortable areas for groups to visit.

Participants in Field Day reportedly had a most enjoyable time. The Club oper-

ated on low power in the 2-A Battery class and produced in the neighborhood of 3,000 points. Co-coordinators Bob Baltz/N3MNT and Dick McKelvie/KE3HQ (Bob also managed one of the HF stations) wish to express special thanks to: Dan Weisenburger/KW4T who managed the 2nd HF station, Bill Kitchin/N3KHI, manager of the 6-meter sideband and 2-meter sideband stations, Tony Young/WA3YLO who was in charge of the Novice/Tech station and Dave Walter/N3BFO who supervised the packet station. Dave and Anna/N3JYU returned from Phoenix, AZ especially to participate in Field Day. Kudos, also, to Tom Wolff/N3BXW who came in on Sunday morning to cook breakfast for everyone.

On Sunday morning June 26th, in spite of Field Day competition, Hayden Leon/N8MOY managed to get a group of ten volunteers together to handle communications for the Annapolis Triathlon. The 9-mile swim, the 22-mile bicycle course and the 6.2 mile run all started and finished at the St. John's College Boathouse. The triathlon organizers were most appreciative and sent a hearty "thanks" and "well done" to the whole crew.

At the AARC Clubhouse on June 11th, Bob Israel/WC3I, Oscar Ramsey/NV3G and Charlie Tiemeyer/W3RMD gave 37 tests to 18 persons. Fourteen tests were passed with 9 upgrades. Dick McKelvie/KE3HQ and Jeff Smith/N30KY graded. Robert Kammer/N3POX acted as runner.

Bettye Tiemeyer/K3VRZ and Coordinator Nancy Alley/NT3Z registered. The next testing session at the clubhouse will be on August 13th.

Congratulations to Gary Wisniewski (awaiting call) who upgraded to General and to Owen Lowe/N3NYZ who is now Tech+. Two first calls were received: Cap'n Bob Spore is N3SBR and James Mauck is KB3BCF.

73, Holly/N3BMB

Alexandria Radio Club

- ✧ Meetings: Second Friday of each month, 8:00PM, American Red Cross Building, 401 Duke Street, Alexandria, VA
- ✧ Club Station: W4HFH
- ✧ Repeaters: 147.315+, 444.600+ (Cross Linked W/2MTRS), 53.13-, 224.82-(Cross Linked W/6MTRS), 919.6-, 1282.6-
- ✧ Net: Every Thursday evening at 8:00PM, 147.315/444.6
- ✧ Information: Harry Jones-N4CWP, 703-790-9613.

Why is it that a station can be so strong, yet can't seem to hear you or anyone else. Conversely, it amazes me how good some ops are when i try to work a weak signal and get immediate response with a 5X9.

Well that's ham radio and the usual experiences of field day operating. This year we joined forces with Arlington ARC at our usual location, Ft. Ward Park in Alexandria. The weather was great as were the fellowship, operating and food.

Even with the low sun spot cycle, operating seemed to be good and I think we topped our efforts of last year. No equipment was lost this year, the generator ran quietly all week end, and generally it was a very good event.

We are now down to dup-checking logs and thinking of next year. Not much planning, just thinking about a better antenna, softer bench, etc. As for planning, I think we have reached the ultimate level. At Manassass hamfest, Chuck points to each of us assembled in the group and says, "You're 10, you're 15, you're 20, etc.

N4CWP

Antietam Radio Association

- ✧ Meetings: First & Third Tuesdays at 8 pm. All mounths except July & August When meetings are on the first Tuesday only at E-O.C. of Washington County, Maryland Courthouse Annex, Summit Ave (Alley Entrance) Hagerstown, Maryland.
- ✧ President: Steve Blevins - N3MVL, (301) 797-2767 Vice President: C.F.W. Anderson - NF3X, 733-3061 Secretary: Don Cripe - KE3MM, (717) 762-8223 Treasurer: Page Pyne - WA3EOP, (301) 714-0688 (Main-tains Club Office)
- ✧ Nets: Tuesday 146.94 - 7 pm. Open to all; Wednesdays 147.09 - 7 pm. Open to all Thursday 147.09 - 7 pm. Regular Net & Swap Net
- ✧ Mailing Address: P.O. Box 52, Hagerstown, Maryland, 21741

On the 7 June 1994 our ARA meeting was given a treat from Eldon Geiman KA3ZKV. His presentation was on the Commercial development of satellite TV called DirecTv. Many thanks to Eldon for his fine presentation.

There are many amateur radio enthusiast that use the famous Appalachian Trail. An interest has been generated to have a standard frequency from the 2-meter band set apart for emergency use. Currently a study is being conducted and a tentative frequency has been set. According to Charles Anderson (NF3X), the frequency is 146.58 Simplex. There should be more information within the next quarter about this.

In honor of Hiram P. Maxim - W1AW; a public gravesite dedication of his marker will be conducted on the 2 September at the Cemetery. In association with the special day; a special event station has been established. It will begin on September 2 at 15:00 Hrs. GMT until Saturday at 04:00 Hrs- GMT. \

Continued on next page

Arlington Amateur Radio Club

- ✧ Meetings: Third Tuesday of each month at 7:30 PM
- ✧ Place: Red Cross building, 4333 Arlington Blvd., Arlington, VA
- ✧ Net: Tuesdays (except third Tuesday), 7:30 PM, 145.47(-)
- ✧ Information: Mike Callaham, NW3V 241-5618 or WA3TAI
- ✧ Mail: 4333 Arlington Blvd., Arlington, VA 22203

Field Day '94 has long since passed but we'd still like to publicly thank Chuck Rexroad, N4HCP, and the rest of the Alexandria Amateur Radio Club for inviting us to operate W4HFH with them. We all had a great time, ate very well thanks to Gerry, N3EVT, and made a respectable number of contacts.

At the last meeting we learned that Allen Calvert passed his no code tech exam and is waiting for his call. Congratulations Allen! Now he's busy setting up his station. George, KR4MU, and Gerry, N4GA, went over to help Allen put a load on his R-7 before he mounted it. He'll be ready to transmit as soon as he gets his call. Allen also donated some software to the club, "Hampass for Windows.: He said it helped him study for the novice and tech written exams. Thank you Allen.

Another recent new member, Walt Raif, has worked through the ARRL training video the club bought in May and is planning to take his exam July 8th. Good luck Walt!

We spent the rest of the June meeting talking about Field Day and then we watched the excellent video Joe, AB4RA, put together of the 1990 Field Day.

At the next meeting, July 19, Mike, NW3V, will demonstrate how to build cables to connect HT's to laptop computers for a

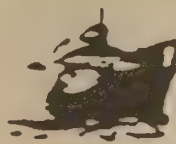
portable packet station. As always, you're welcome to join us.

FYI-WAS

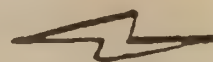
I picked a message off of Beachcomber Joe's LLBBS (703) 243-0024, plenty of interest to hams) from Murry Green, via NW3V, to relay the following: "K3BEQ is authorized to check QSL cards for Worked All States awards. Cards can usually be checked on a While-U-Wait basis."

73, Marc, KD4PDC

Chapter X



Society



of Wireless Pioneers

THE INTERNATIONAL ORGANIZATION
OF PROFESSIONAL RADIO TELEGRAPHERS

For Information Call
(703-536-9537)

Antietam - Continued from page 34

It will also continue from September 3 at 12:00 Hrs. GMT to September 4 at 24:00 Hrs. GMT- Here are the suggested frequencies: CW: 3.640 7.045 14.040 21.040 28.040 MHZ SSB: 3.920 7.240 14.240 21.295 28.350 MHZ

There is a commemorative certificate to be offered by sending your QSL and SASE to:

Antietam Radio Association
Attn: Special Event Station - W3CWC
P.O. Box 52
Hagerstown, MD 21740-0052

Baltimore Amateur Radio Club

Meetings: Twice monthly, 7:30 pm at Towson Presbyterian Church in Towson, Maryland. First Wednesday of the month: business meeting, Third Wednesday of the month: programming

Repeaters: W3FT/RPTR 146.67(-)/224.24(-) (no PL) and 449.625(-) (PL 107.2) Note: two meter/220 Mhz are linked.

Club Net: Every Tuesday night at 8:30 pm on 146.67/224.24

BBS: (410) 665-7646 (minimum 2400 baud)

Club Voice Mail/Information: (410) HAM-TALK

GREATER BALTIMORE HAMBOREE &
COMPUTERFEST/MARYLAND STATE
ARRL CONVENTION INFORMATION:
(410) HAM-FEST or (800) HAM-FEST
MAILING: BARC, Inc.; P.O. BOX 120;
Reisterstown MD 21136

New officers elected at the June, 1994 meeting are:

President: William (Nick) Nicholson, N3LRK

Vice President: Don Baker, N2MCG

Treasurer: Nelson Ross, W3BGX

Recording Secretary: Andy Boyle, N3JYO

Corresponding Secretary: Rosie Falcon, N3IVO

It has been a busy spring for the testing and educational teams. The spring class is over, and the club VE team held a special testing session for the class. The next class will begin in the fall. Additionally, testing was held at the church on June 16th. Next testing session will be at 7:30 pm on Thursday, August 18th at the Towson Presbyterian Church.

Bob Kennick, WB3HNV, our testing coordinator, has been especially busy, with spring public service events including providing radio coverage for the March of Dimes City Walk (in Baltimore) in April, and the Harford County American Diabetes Association

Bikathon in June. Upcoming is a demonstration of packet and amateur radio for the national meeting of the Osteogenesis Imperfecta Foundation in downtown Baltimore on July 23, 1994.

Andy N3JYO, organized this year's Field Day outing, which took place at the Jacksonville Volunteer Fire Company. We used our new 50 foot military-style crank-up towers, which were so easy to use that one person can deploy a unit in just a few hours. We worked HF and VHF from the site, with technical assistance from Maurice KA3EJJ (who also brought his Amateur TV gear to the site).

Programming at the club meetings has been outstanding this year, thanks to the efforts of Bruce W3UWV. Recent program topics have included radio astronomy, the RF spectrum below 500 Khz, packet radio, and more. The August 17 club meeting will be a field trip to the electronics museum (near Westinghouse), guided by Heru Walmsley, W3WVV.

The club continues to hold monthly hidden transmitter hunts; check the club voice information line for current information.

..73 de N3IVO/ Rosie (Corresponding Sec'y)

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Columbia Amateur Radio Association (CARA)

Club Meeting: 4th Tuesday of the month at 8:30 p.m., at the county's Howard Building on Court House Drive in Ellicott City.

Net: 147.39 repeater at 8:30 p.m. each Tuesday except for meeting nights.

Youth Net: 147.135 repeater at 7:30 p.m. every Thursday.

Repeaters: 147.735/147.135 (cross-linked to 222.32/223.92); 147.990/147.390 (Direct dial 911); 222.32/223.92 (cross-linked to 147.735/147.135); and 443.275/448.275.

CARA Breakfast: 9:30 a.m. on the 2nd Saturday of each month. Contact Dionne Frank -KA3ZDLf (410)531-2933.

Information: Bob Scarburgh, Pres - KC3EV, (410)465-2421

most impressive demonstration. Hams will really take to it when it comes onto the market in September.

Our new Elmer committee is up and running, with 12 members versed in everything from antennas to packet radio to DXing to foxhunting. Contact chairman John W3GJN on (410)750-1309. CARA has lost a dedicated member and T-MARC and FAR rep in Ivan - K4IML whose job has moved him to Massachusetts. We wish him good luck and success.

Mark your calendar for Saturday, Aug. 27th at 2:00 p.m. for the CARA Pool Party. It will again be hosted by Alan - N3AC. Call Joy - KE3MP or Dionne KA3ZDL for details.

73's Jean Williams - KB3AOT

Field Day turned out to be a fun time for the Columbia Amateur Radio Association (CARA). Saturday at our site, located in a large playground/field behind the Clarksville Elementary School on Rt. 108 in Clarkesville, found the weather hot but bearable with a nice breeze and clouds passing over with a few sprinkles from time to time. But it was still hot, dirty work the guys putting up the towers and antennas for the stations that would be operating. The food committee headed by Joy - KE3MP and Dionne - KA3ZDL made sure there was plenty of ice,, water, soft drinks, and snacks as well as hotdogs and burgers to be grilled for the main evening meal. Most stations were ready to go at 1800 utc. One or two participants brought their family and the kids had a grand adventure sleeping over in tents.

Our June meeting featured a talk and demonstration of the LinkMate by Bob Damrau - WA1LOT, operations manager of the Link Plus Corp. LinkMate contains the Lincomplex technology for boosting voice to signal noise by an average of 22 dB. It was a

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TNX es 73 de Kevin, N2KXX - Pres.

FAUQUIER AMATEUR RADIO ASSOCIATION

- ✧ Meeting: 7:30 pm Second Tuesday of the month except July, August & December. shadow Lawn Recreation Center, Warrenton VA Next meeting September 13.
- ✧ Breakfast: Last Saturday of the month.
- ✧ Net: Every Wednesday, 9:00pm local, 147.165 MHz Rptr
- ✧ Packet: FARA7 node 145.070 MHz
- ✧ FBBS9 Bulletin Board 145.090 MHz
- ✧ Repeater: NZ4N/R Tx 147.165 MHz, Rx 147.765 mHz
- ✧ Newsletter: Toroid, Monthly.
- ✧ Information: Neil, AB4YK, (703) 364 3861

PRESIDENT'S CORNER

Field Day was GREAT! The weather was the best I have seen in the last 5 Field Days. It was hot but the breeze made it just about perfect. Saturday night was not too cold. Fauquier's field day efforts took place at Warrenton. The radio noise levels could have been less, but everything was so enjoyable — amateur radio wouldn't be amateur radio without a few challenges. The camaraderie was super with everyone helping everyone to get on the air and finally all the stations were up and operational (we noted that Mark, KD6AKC, got the Tech/Novice station up on the air on time). Also, there was good food to eat and drinks to drink.

Bob, AD4IW, continued to amaze us with his construction efforts which included the great new covered "palace" - a 10 foot by 15 foot structure (I'm guessing at the dimensions). It's a covered area for eating and drinking and refuge from the sun's heat with its silvered tarp. Bob also made the 40 ft. VHF mast and mounting hardware, he made the 4 element 6 meter beam, the masts for the CW and SSB operations and was involved in their putting up and their taking down.

He provided batteries and ladder and so much more. Bob was the last man to leave the field day site as he cleared up the parts of a mast that got away from us during the takedown.

Many of us operated and logged the contacts. Frank, W4NHJ, developed the logging software and Sue Stout, N3BML, and others provided the laptop computers for logging. Frank, W4NHJ handled the submission to ARRL. Duffy, KD6RNE, capably brought good food and drinks on time.

Larry, K4LLQ, was the Field Day Field Marshall. Full of competence, willing to help all with solutions to temporary vexing problems. Larry was the bringer of so many items from lawn mower to cables to headphones to the VHF tower, chairs and antennas, and more.

Others, in their absence, contributed to the success of the operation in their different ways. Gary Memory, N7BRJ, gave a cash gift that was applied to food and drink and Don, WY2V, laid an excellent foundation of organizational effort that we were able to capitalize on. Dan, N3ND, provided the VHF rigs for the higher bands. Don and Dan we also missed for their operating skills but others ably filled the gap. Don and Dan's absence precipitated the process of breaking in the next generation of excellent Field Day operators.

I personally had the pleasure of operating the VHF station. We were blessed with great sporadic E openings on 6 m on both days all across the US. We worked the Canadian Maritime provinces, Minnesota, South Texas and South Florida. There was a Cuban in there with a strong signal but I could not reach him with my 6 watts.

Field day was, in short, a great occasion with an excellent outcome.

Turning to the future, if you can come to Western Sizzlin, Saturday 7:30 am to 9:00 am July 30, we'll be pleased to see you.

73 Neil, AB4YK.

Green Mountain Repeater Association

- ☐ Meetings: Board of Directors, Last Monday of each Month
- ☐ Repeaters: KD3VR-146.61(Cheverly)
K3GXF-146.88(Greenbelt)
- ☐ Luncheon: First Saturday of each Month at the Fountain Cafe, in the Laurel Shopping Center Mall, U.S. Rt.1 (Baltimore Ave.) and Cherry Lane. Starts at 11:30 AM
- ☐ Mailing: GMRA, P.O. Box 429, Riverdale MD 20737
- ☐ Information: Boyd Nelson - KZ3Z (301) 434-0934

GMRA held it's 1st Saturday of the Month lunch social at Shoney's on Rt.1 in the Laurel Lakes Shopping area. There was a fair turnout of members and friends. It was a pleasure seeing Murry, K3BEQ and his grandson Paul. Murry was the first President of GMRA and had the first repeater in his home in Cheverly, MD. We have been alternating between Shoney's and Laurel Center Mall for lunch.

Joe, KD3VR, President, usually welcomes everyone at the lunch gatherings and gives off tib-bits of information or recognizes new comers. Alice, WB3AOA, Joe's lovely spouse visits the different tables with friendly greetings.

We would like to welcome a new face to the group and that is "Doc" N3NAG. Doc is a musician and played piano and piano accordion back in the Big Band era. Doc played with Sammy Kaye, Little Tommy Tucker and many other groups. Doc's lovely daughter, Shirley, brought her Dad to the luncheon.

Doc, N3NAG, was also one of the first three to organize "React" a 24 hour monitoring communications group helping motorists. Their first station was in the Wheaton Howard Johnson's area.

Dan, W3RYQ, H.D., N3LFL and Dan, KA8YPY have been selected to be on the technical Committee. They will alternately monitor the Repeater frequencies and meet with the Board of Directors monthly.

Some of us have been experiencing interference on the 146.88 repeater at certain times. The Richmond, VA and the Cumberland, MD. 146.88 machines have been heard. We hope it is just ducting.

We will be looking for you at the next luncheon date in the Laurel Shopping Center Mall. Lets make it a big turnout this time.

K3BEQ, Murry Green of Cheverly, MD is authorized to check QSL cards for all WAS awards including 5 Band WAS awards. Checking can usually be done while you wait.

73's Ken Easton, N3HLY

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Prince George's Wireless Association

- ✧ Meetings: First working Tuesday of each month, 7:30 P.M.; American Red Cross Bldg.; 6206 Belcrest Rd. Hyattsville, MD 20782
- ✧ Club Station: K3CEZ
- ✧ Mailing: 4109 Kennedy St., Hyattsville, MD 20781
- ✧ Information: Frank Holton - WA3ZMW, (301) 927-1245

PGWA held it's monthly meeting on Tuesday, June 6, 1994 with Frank, WA3ZMW presiding. The president made a few announcements and read the minutes of the previous meeting. Dan W3SWD, our secretary was absent due to illness. Charles, KA3COT gave the Treasurer's report. The meeting was a short one giving way to a guest speaker from the headquarters of the Boy Scouts of America.

Lisa Hall, a very knowledgeable young lady from P.G. County B.S.A. and coordinator for the Explorer Scout group, gave an interesting talk. Miss Hall expressed an interest in the Explorer Scouts involving Amateur Radio in their study program. She contacted PGWA to see if we might become involved as Elmers.

On June 1st and 2nd PGWA in conjunction with the Red Cross participated in a disaster drill "Hurricane Omar". This multi-stage hurricane exercise provided an opportunity to test integrated emergency management operations, to include State, Federal and Local preparedness plans.

The scenario included the National Weather Service (NWS) simulated plotting of the Hurricane from May 18, 1994 approaching the Maryland and Delaware shores and hitting these regions June 1st and 2nd. PGWA worked from K3CEZ their Radio Station within the Red Cross Bldg. han-

dling official traffic on ARRL message forms. Kathy Orhelein, N3QPO was the Red Cross Disaster Chairperson and handled not only the Red Cross disaster teams but passed messages to our group to handle through Amateur Bands. Kathy is also a member of PGWA besides being a Red Cross Volunteer. She does a terrific job.

Tom Mack, N3BEO helped by handling messages on the Red Cross radio in handling messages through the Red Cross frequencies and keeping contact with K3CEZ through Walkie-Talkie type hand helds. Jim Fay, N3HPZ was a key player reporting from the disaster and shelter sites. Dan, W3SWD was Net Traffic Control with WA3ZMW, Frank, KA3COT Charles, N3LRN Leah, and N3HLY Ken, working portable generator and equipment.

Greetings to our newest members, Leah Choper - N3LRN and Emil Kadam - N3PGX. At the time of this writing we are preparing for Field Day.

73's From Ken Easton, N3HLY

REMEMBER

Please include your club header with your column. This will allow us to keep you club's information up to date.

When submitting your club column, please do not put it into columns on the page. This makes it very difficult to reformat the information for publication in Auto-Call.

Type your information flush left. When typing your header please do not type your club name in caps. Use upper & lower case letters. Also for items such as meetings: address: information: please don't use caps.

Do not use bullets in your club header. I have to remove them which slows production.

Washington Metropolitan Area
Federal Systems
Amateur Radio Association/ARA
(formerly IBM)

- ✧ Meetings: First Tuesday of the month that is a work day, 5:45 PM to 7:00 PM
- ✧ Next Meeting: In the summer, please call ahead to confirm!
- ✧ Informal Net: Sunday evenings, 147.39 MHz (+600 offset) at 21:00L
- ✧ Packet: 145.75 MHz, running TCP/IP netcode (WA3YOO) in support of Montgomery County RACES
- ✧ Information: Chuck Feldman/W3GQY (301) 470-1951; else, please leave Radio Room VoiceMail at (301) 240-6877

Just to bring Auto-Call readers up to date with (semi)-current events (that may have been "betwixt and between" AUTO-CALL's monthly publication deadlines), we note the following events:

We were pleased to be able to personally greet and meet with Gil Gonzalez, President of the new Loral Federal Systems (LFS) Club for the Washington Metropolitan Area. An IBM alumnus, Gil works for LFS/Gaithersburg in the secure/classified area. From the outset, he has shown himself to be a very enthusiastic supporter of the Federal Systems ARA.

On June 2nd, Gil graciously invited yours truly to make an ARA presentation to the LFS Club Board of Directors. At this time, we wish to express our appreciation to Gil and the other Board members for their genuine hospitality.

By general consensus (back by "popular demand"), the ARA voted to hold another "Hungry Hams" breakfast meeting on Saturday, July 16. Again, due to publication deadlines, we are writing about this event before its occurrence and by the time this

article is printed, the event will have occurred! As of this writing, it is anticipated that the group will again meet at Shoney's--but this time (for a change of pace), we'll meet at the Shoney's restaurant located on Montgomery Village Avenue-Route 124 (adjacent to the "little" Village Mall.)

NOTE: Naturally, "talk-in" will be provided on 146.52 MHz (-600 offset).

As this is being written, Field Day 1994 is just around the corner. It is anticipated that one or more ARA members will participate in the Field Day operations at Little Bennett Regional Park in Clarksburg, being sponsored by the Montgomery Amateur Radio Club (MARC). Since the purpose of the annual Field Day event is to test ourselves and our amateur equipment under simulated emergency conditions, gaining this experience can only enhance our "readiness response" in the event of a real disaster.

Because of business travel (WA3YHE/Frank), vacation schedules (N3FJJ/Roel), project uncertainties (N3HSA/Erinn), and family illness (W3GQY/Chuck), the WMA/Federal Systems ARA may elect not to meet in August--for our club, the summer meetings are considered optional anyway. We would hope, however, to pick up the pace in September and get down to the business of the ARA's near-term and long-term future. Regardless of our individual fates, collectively, we want to ensure a bright future for the ARA. Whether this is onsite at Loral or offsite within the local environs is not germane; whether the current officer cadre remains intact, or a new core of leaders "rises from the ashes--phoenix like..." is immaterial. What matters is that the Amateur Radio tradition cultivated by IBM for more than 25 years and recently renewed at Loral Federal Systems is preserved as a viable community asset, independent of location...long live the ARA!

'73, Erinn/N3HSA, President

The subject of many articles in this issue of Auto-Call will be the recent Field Day experiences of our member clubs, and this Laurel article will be no exception.

However, I'd like to mention some of the upcoming activities with which the club will be involved. On Saturday July 2, the club will be assisting the parade subcommittee of the Laurel 4th of July Committee by monitoring the parade route and shadowing key people.

The Laurel ARC has finally been named an official SAREX participant and will be linking Eisenhower Middle School with the STS Mission 64 scheduled to be launched on 9 September. We will be borrowing displays from NASA and setting them up at the school just before it opens. Unfortunately, we weren't made official until the last day of school so all the build up we planned got scrubbed. The mission will go off two days after school starts.

Since we now have a nice meeting place and access pretty much as we need it, the membership has shown an interest in having some construction classes. We'll be scheduling them in the near future. Speaking of classes, we will be holding our Novice/Tech class beginning around the third week in September and plan to hold them in a meeting room in the still under construction MNCPPC recreation center on Brooklyn Bridge Rd. in Laurel. One advantage to holding it there is that it should be published in their catalog of events and get some widespread publicity.

The Laurel VE program is going strong. We will be doing the test sessions for the BRATS Hamfest at Timonium on July 10 and also at the FARFEST in September. As usual there is no fee for the tests when given by

the Laurel VEC.

Field Day for the Laurel ARC is always an adventure. Last year it involved a cutting torch in an effort to erect a six element HF beam. From that interesting experience evolved an idea by Mike/WB3HUP for putting a beam on a large plastic trapezoid and blowing it up with a fan, similar to a dome over a pool or tennis court. He spent hours constructing it and it worked as calculated. We made one 15M contact before the seams began blowing out. The trapezoid had a 20'x 20' base, an 11'x 11' top, and was about 35' tall. The beam was fixed in a westerly direction. Another interesting experiment was a helium-filled blimp we sent up with a long wire. We used this to make 22 160M contacts Saturday night. This year we tried hard to get as many bonus points as possible and that included working the RS 12/13 satellite. Even with all this activity, we still had our priorities straight and stopped for a pot luck dinner with lots of spouses enjoying this part of Field Day.

Hope everyone had as good a time as we did!

73 de Jim/WI3N

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MADRAS
The Maryland Apple Dumpling
Radio Amateur Society, Inc.

- ✧ Meetings: 2nd and 4th Thursdays - 7:00 PM, NBC building - WKYS Conference Room, 4001 Nebraska Ave., N.W. Washington, DC 20016
- ✧ Net: 1st & 3rd Thursday at 8:30 PM on 145.45 MHz.
- ✧ Repeaters: 444.100/449.100 MHz. - 145.45/144.85 MHz.
- ✧ BBS: 145.030 MHz. Call Sign: N3GKZ Alias: MADBBS (This is a closed BBS Station)
- ✧ Mailing: P.O. box 2468 - Wheaton, MD 20902
- ✧ Information: Hani Raad - AA3EI (202) 223-3925, Larry Ziecheck - N3GKZ (301) 984-6112, Jean Black - N3PLC (301) 984-6112

A very special "Thank You" to MADRAS members, non-members and friends for the effort put forth on Field Day '94, Everyone worked diligently to make this one of our best Field Day efforts. All we have to do now is count up the points and see how we faired this year. You all did a fine job and it is most appreciated.

We are planning our End of Summer dinner for sometime in August or September. We will be sending out notices as soon as the arrangements are made.

During the summer our Net will be meeting every Thursday at 8:30 P.M., since we do not hold any meetings until September.

73's Jean

The Mid-Atlantic DX
and Repeater Association

- ✧ Meetings: By published schedule, generally the second Thursday of each month. Meeting locations rotate among places in Maryland, Pennsylvania, Virginia and West Virginia.
- ✧ On The Air: 1930 Tuesdays on 147.66/06
- ✧ Address: 230 North Potomac Street, Suite 2A, Hagerstown MD 21740
- ✧ Information: Call our Voice BBS: 301-416-8447, select Box 101 and leave your message requesting club info.

As with most clubs in the USA, our news for June has a Field Day flavor. We need to recognize Jim, KA3SDM, trustee of the 147.66/06 repeater, who also provided us with an excellent Field Day site at his farm near Fort Frederick. Jim is still re-covering from complications following knee surgery and wasn't able to come out and supervise us this time, but wait 'til next year! Based on the weekday weather, Mike, WB8VBW, had conducted a last-minute campaign to get some box fans for the radios and operators. Saturday turned out to be a pleasant, breezy day which gave way to a cool mountain evening. Some stalwart ops headed for home after midnight looking for warm places to sleep.

By the time you read this, MADRA's first VE session (July 16 at Smithsburg) will be all over but the filing and record keeping. Interest in this and other club activities keeps surfacing on the Tuesday night net. The net seems to be growing at the rate of about one op a week, with Curt, N3QIZ, ably emcee'ing check-ins, personal news/comments, equipment swaps and ARRL or other announcements.

Continued on next page

Mount Vernon Amateur Radio Club

- ✧ Meetings: Second Thursday of each month, 7:30 p.m. (except December) Mt. Vernon Governmental Center 2511 Parker's Lane, Alexandria, VA 22308
- ✧ Repeater: WD4PDP/R 146.055 input 146.655 output
- ✧ Nets: Every Tuesday at 9:00 p.m. Starts on 2-meter then moves to 10-meter on 28.408
- ✧ Information: John KI4HK, (703) 780-2882 or Julie KD4WSZ, (703) 799-9466
- ✧ Training Classes: John Forrest WZ4A, (703) 971-3905
- ✧ Testing: Second Saturday of each month, 9:00 a.m. Robert E. Lee RECcenter in Lee District Park 6601 Telegraph Rd., Alexandria, VA 22310
- ✧ Mailing Address: Mt. Vernon Amateur Radio Club (MVARC) c/o Joe Salemi KR4CZ P.O. BOX 7234 Alexandria, VA 22307

Field Day was another annual success for MVARC. Numerous contacts (to be tabulated), a fine picnic, and fabulous weather. Sun, sun and more sun. We're looking forward to June '95, perhaps to out-do ourselves. Now that would be an appreciated accomplishment.

July 4th was spent at Lee District Park. Providing communication safety and helpful coordination. Another sunny day, but this year we remembered to bring water.

MVARC looks forward to participating in other events this summer and early fall. Call Steve WB4EEA 780-7248 for details. Also, listen for the Public Service announcements on the 145.91 repeater, Wednesday evenings at 8:30 pm (2030 hrs).

MVARC had offered a concentrated novice/tech class during the month of June. On June 29th, testing was given and 75 percent

passed. We must be doing something right. Join us for more classes and testing.

Testing; second Saturday of every month. Code and written, all levels. At Lee District Park in Alexandria. No charge and walk-ins are welcome. Call Frank N4GUS at (703) 455-1510 for information or if you are interested in being a VE or helping at the exams. You don't have to be a VE to help out. Please arrive between 9 & 10 a.m. for testing. MVARC's

Next Meeting: August 11, 1994, 1930hrs (7:30pm)

Julie, KD4WSZ

Mid Atlantic DX - Continued from page 43

With the new antenna and feedline in place, we're finding DX and repeater enthusiasts checking in from some impressive distances for 2M FM/RPT.

The vandalism inflicted on the 147.06 repeater building has been repaired and the fine folks of F&M Bank have agreed to the return of the 147.345 repeater to the North Mountain site near Martinsburg WV. The 448.125 repeater system is working well; we will be repainting and adjusting the tower installation before the fall. Apologies to 220 enthusiasts: 224.20 is off the air but will be returned to the 440 site soon. It will become part of a multi-repeater 220 system.

We salute (and so should all Hams) the plans of the Antietam Radio Association to erect a plaque and operate a special event station to honor Percy Maxim, W1AW, whose gravesite is at Hagerstown. As this is written on 4th of July weekend when we honor those whose "lives, fortunes and sacred honor" were pledged for posterity (us), it is good to remember that The Old Man made almost as great a personal sacrifice in his travels after WWI to foster amateur radio throughout the world.

The North Point FM Association

- ✧ Meetings: 2nd Saturday of each month at Lord Fairfax Community College, Middletown, VA
- ✧ Weekly Nets: District 1 ARES Net: Sundays at 8 pm on 145.21 North Point 440 Net: Thursdays at 8:30 pm on 449.075
- ✧ Repeaters: 53.67 - KD4JBY 145.21 - N4RAG 449.075 - KB4KRO
- ✧ Packet BBS: 145.73 - BBSD1 (WD4RPV-5)
- ✧ Information: Alan Moeck (WA2RPX) 869-1117
- ✧ Mailing Address: P.O. Box 327 Stephens City, VA 22655

In spite of the heat and humidity, members of the NPFMA have been hard at work on various projects this month.

Our 6 Meter machine is back on the air from the northwestern part of Frederick County. It is not the most ideal spot, but at least it is up and running again. Bill (KD4JBY) is looking for a more suitable site.

Our 440 machine has been given a much needed tune-up, and a few other fixes. Marc (KB4KRO) had the machine down for a few days while it was being serviced, but it is up and running quite well now. He may decide to put the PL back on the repeater, due to some interference from the north. If so, the PL is 146.2. As a reminder, the North Point 440 Net is held every Thursday evening on that repeater at 8:30 PM.

Don (N4RAG) has recently joined the NPFMA, and we are proud to have him aboard. He has put a tremendous amount of work into his repeater, located on 145.21, and the repeater is working better than ever. The repeater also has dial-up links to the Harrisonburg (147.225) and Charlottesville (146.895) repeaters. The NPFMA is very happy to be able to call the 145.21 our

"home" 2 meter repeater.

The NPFMA participated in Field Day this year. Over 700 contacts were made during the event, as class 1A. Helping out in our first attempt at this event were NB3O, KD4WSP, KR4DO, KD4LSN, N3NVF, KD4IEW, KQ4TL, N4TRX, and KB4WRE. Also showing up to operate were two people who are still waiting for their ticket to arrive; Brian Cochran and Rob Pectol. A great time was had by all, and many thanks go to Steve (NB3O) and Angie (KD4WSP) for the use of their house (and refreshments!) during the event.

Our home packet BBS - BBSD1 - is now operating at full power from Stephens City, Virginia. Weather forecasts, watches, and warnings can be found on BBSD1. These are the actual broadcasts as compiled by the National Weather Service or the National Severe Storms Forecast Center, and forwarded to the BBS shortly after their issuance by Steve (KB2CEV). Steve has also been very busy with the FOAKS node, located near Fair Oaks Mall. FOAKS4 is now on the air at that location, on 440.950. It is only using 5 watts for the time being, but it will be upgraded to a 100 watt radio in the future. FOAKS was recently upgraded to it's 100 watt radio, and everything is working well. FOAKS can be found on the SKYWARN & ARES support frequency of 145.730.

That is all for now - see you next month.

73, Sean - WD4RPV

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**Northern Virginia
FM Association**

- ✧ Meetings: Fall, Winter, Spring
- ✧ Weekly Nets: NVFMA, Wed, 8PM, 146.79
ARES, Sun 9PM, 146.91, - Equipment
Clini 1st Wed of Month, 7:30PM, 146.79
Repeaters: 52.37/53.37, 146.19/146.79,
146.31/146.91, 222.50/224.10 XLink,
222.74/224.34, 449.75/444.75, 1272.1/
1292.1
- ✧ Membership Info: Ann Herlich, KD4GSU
(703) 481-1458 Mailing Address: NVFMA,
P.O. Box 486, McLean, VA 22101

"THANKS to all members who have sent in their 94/95 dues to date Your continued support is greatly appreciated.

HELP NEEDED: One of our, sight and mobility-impaired members, Jim Moore, N40PI, is seeking antenna help. He has a 2-meter and a tri-band (10-15-20 meter) beam, which appear to have poor directivity. Any volunteers to help Jim? 703-668-629 Rt 1, Box 224, Purcellville VA 22132

NOTE: As a service to our new Radio Amateurs, we'll try to include useful, but brief, technical information on a monthly basis.

JULY'S TECH-TIP: Transmission line losses should be minimized improve Your receiver and transmitter performance. Consider the following: If your 2-meter mobile rig puts out 30 watts and you suffer a 3 dB line loss, only 15 watts reaches the antenna. Similarly, 2 dB loss equates to 18.9 watts output, 1dB = 23.8 watts, 0.5 dB = 26.7 watts.

Coax cable losses increase directly with frequency. Consequently, check the specifications (dB/100ft) especially when working 440 MHz 1.2 GHz bands.

Don't forget to tune the antenna for the lowest VSWR over your operating bandwidth. A 3:1 VSWR results in a percentage reflection of 50 percent; 1.5:1, 20percent reflection; 1.11:1, 5 percent reflection; and 1.01:1, 0.5 percent reflection.

Excess reflected RF power can result in excess power dissipated in the "final" RF power amplifier; causes premature failure of the RF power bipolar or field effect transistors or, if you're lucky, automatic power reduction by VSWR protection circuitry.

Lastly, any losses; i.e., line or preselection filter insertion losses add directly (in dB's) to the receivers noise figure.

73, Ann, KD4GSU

Carroll County Amateur Radio Club

- ✧ Meetings: 2nd Monday at 7:30 pm, Carroll County EOC Washinton Road (Rte 32) 1 mile north of Route 97, Westminster, MD.
- ✧ Repeaters: 145.41 MHz, 449.875 MHz, 53.090/52.090 MHz
- ✧ Mail: CCARC, Inc., P.O. Box 2099, Westminster, MD 21158
- ✧ BBS: K3ZPN, 145.03 MHz and 441.000 MHz

Give us a shout on any of the repeaters if you're in the area, or stop by during a club meeting.

Business, business, business, that's all we did at this last meeting. We voted in the new by-laws and from then on we had to reinstate all the committees that were no longer considered standing committees.

Continued on next page

**QUARTER CENTURY
WIRELESS ASSOCIATION
VICK CLARK CHAPTER 91**

- ✧ Meetings: Quarterly as announced. Usually at the Galaxy Cafeteria in Falls Church, VA
- ✧ Sunday Morning Net: 9 AM on 146.790 MHz.
- ✧ Information: Call Secretary Lew Bradley (703) 780-9292
- ✧ Mailing Address: 8520 Culver Place, Alexandria, VA

The Vick Clark Chapter has for a number of years enjoyed a Picnic/Meeting at the home of our Vice President Ethel Smith (K4LMB). On June 11th another of these memorable outings took place. While the weather appeared to be threatening there was no real problem and some 34 people turned out to enjoy some eyeball QSO's and great food. Ethel provided the Burgers, Chicken, and other goodies and each member brought their favorite side dish. As those who have been there are aware Ethel has a beautiful well manicured back yard with an impressive array of antennas. This provided a fine background for this event and as usual a good time was enjoyed by all.

The meeting that followed the meal was by design kept to a minimum. This year in the absence of our President Jim Wilcox (K4JAP) Ethel conducted the meeting with her usual flair. A study by Dick Rucker (KM4ML) on the provision of Amateur Radio related books for area libraries and a study concerning long term recognition for our Silent Keys was discussed and while the books for Libraries appears to be inappropriate his study on Silent Keys was indorsed as he presented it. The next day during our On The Air meeting Dick accepted the duty of Chapter historian.

In the show and tell session Jack

Kingman (W4JT) brought a board with a large number of old vacuum tubes mounted for display, some of which date back to the 20's. There were a lot of reactions like "That was my first Transmitting Tube etc." Most of these are truly tubes that are indeed rare. Jack has made previous exhibits of old radio equipment and he could probably start a good museum if he wanted to.

73's Lew - W4SWP

Carroll County - Continued from page 46

We will be going to a two meeting a month schedule starting this month. Our second meeting will be held on the third Wednesday of every month and will be devoted to dmateur radio topics, very little business! This months second meeting as you could have guessed was concerned with Field day operations.

The New Windsor Service Center International Festival, topic this year: "Children Around the World", was a big success, as was our special event station at the festival. Numerous copies of the Archie Ham Radio Comic were passed out.

Our BBS is back on line!

Our Field Day operations were a big success, more on them next month.

Don't forget the Mason-Dixon hamfest on October 30TH at the Westminster Ag center. Talk-in: 145.41-, ARRL VEC Testing will be available: register with Page Evans/NE3P, 789 Gettysburg Rd, Littlestown PA 17340, or call 717-359-7610. For advanced table or camping registration mail to: Mason-Dixon Computer Hamfest, PO Box 763, Hanover PA 17331, or call Gary Viands, KE3FN 717-259-7342.

73, KE3FL/Phil

Sterling Park Amateur Radio Club

- ✧ Meetings: Third Monday of the month except December, July and August at Sterling Community Center Annex, Church Rd. (Rt. 625) near Route 28, Sterling
- ✧ Mailing: Call Box 599, Sterling, VA, 20167
- ✧ Information: Dick Maylott, W4LMJ, 430-3842 Forrest Snyder, N4UTY, 430-4149

Is life too short for QRP? That's the question SPARC'ers will answer between now and next field day. We operated 2A battery, QRP, for the second year in a row. While there were comments that we got out just as well as we did with a hundred watts, there were also feelings of frustration when you called and called without results. I guess a lot boiled down to mode, band, and time of day. Higher power might have made a satellite QSO a reality, and we certainly would could have worked a few more stations, but would the scoring have been better or worse?

We certainly had one of the most successful field days in recent history. Thanks to the leadership of Steve Harrison, KO0U, the two main stations stayed manned around the clock. Thanks to good sporadic E conditions, the 10-meter novice/tech and 6-meter VHF stations also stayed active. We had a wide choice of antennas. Steve's 2 element tribander was the antenna of choice on 10, 15, and 20. Allan's (W1AEL) vertical worked great on 40 and 20, and Dick's (W4LMJ) quad loop worked well on 40, 20, 15, and 10. Floyd (W4RW) did a major repair job on his trusty multi-band ribbon antenna and that worked great on all bands including 80. The novice/tech station had its own 10-meter dipole. Verticals for 2 and 6 rounded out the antennas.

As this is being written, Steve is still working on the results, but it appears we made well over 600 QSO's and 7000 points. Also, we got nearly all bonus points this year.

We missed Jerry Geil's cooking, but all managed to fend for ourselves pretty well. It sure is convenient being close to home. The site, as usual, was the back area of the Park View High School athletic field. This year we used both slingshots and bow and arrow to find mounts for our antennas on the 80-foot light posts on the ball field. The beginner's luck we had a few years ago was again absent as numerous attempts to hook the posts were necessary. By the time Floyd's antenna repairs were finished, we got started about an hour late, which was an improvement over last year. The weather man certainly cooperated. It was sunny and hot all weekend, although the wind did a number on the canopy for the novice/tech position.

We may be having a special summer meeting, so don't be surprised to get a special issue of the SPARC Gap. We still need to elect officers for the fall, and Dick, W4LMJ, has suggested it may be time for another bulk sort work party for the QSL Bureau. Forrest suggested a get together at a local Pizza parlor might be nice. If you'd like late news on these activities and are not a current SPARC member, give one of us a call. At least put our September 19th open house on your calendar for sure. We have a number of activities shaping up for the fall, already, so find about them at the open house. We are really excited about having use of the special Boy Scout station K2BSA/4 for a camporee in Leesburg during the Jamboree on the Air in October. Jerry Geil, N4PCU, Dave Williams, K7HMP and Red Free, W3FTG, are providing leadership for this activity, so if you're interested in scouting, by all means get in touch with them.

The sunspots are down, but sporadic E is up. Enjoy the summer on your favorite band, and we'll see you in the fall.

73, Dick, W4LMJ

Vienna Wireless Society

- ✧ Meetings: 2nd and 4th Fridays of each month, 7:30 PM, Vienna Community Center, 120 Cherry Street S.E., Vienna, VA
- ✧ Repeaters: K4HTA/R 146.085 in/146.685 out, 443.375 in/448.375 out
- ✧ Nets: Vienna Emergency Net every Wednesday at 7:30 PM, 146.085/146.685. Pow Wow Net every night, except meeting nights, at 9:00 PM on 28.444 MHz. Slow Code every night, except meeting nights, at 8:30 PM on 28.390 MHz.
- ✧ Information: Brian Bayus-N1KCE, (703) 264-1180
- ✧ Training Classes: Paul Wilkins-AB4CY (703) 560-2779

Congratulations to our newest Board Member, Donna Yarbrough-KE4FYM. Also, George Saunders-KR4MJ Has assumed the duties of Secretary of VWS, replacing Nancy Morris-KD4JD who, along with OM, John-K4XH, is moving back to Alabama in August. Many thanks to Nancy for her service. She and John will both be missed. Mel Woods-KN4ZT has assumed the duties of Editor of the VWS RELAY. Thanks to both George and Mel for volunteering their services.

Well, Field Day for VWS at Burke Lake Park was most one of the most convivial and productive in many years, according to the participants. Aply lead by Field Day Chairman, Paul Wilkins-AB4CY, who doubled as chief cook (be loves that spatula for "flip'in burgers), Band Captains: Mark Murray-WX3H (40m), Ron Natalie-W02L (20m), Art Van Wagenen-N4JNJ (15m), Tim Drease-KE4GDX (10m), Chris Bayus-KD4FBU (6m 2m), Bill Steinbach-N9CG (Sat.), Bernie Wimmers-KC4YNP (Packet) and Brian Carney-KD4QVT (Novice) racked up a bunch of points and a first in recent memory satellite contact. At several stations those great scores were recorded on the new logging software which was provided, lessons included, by Bernie Stuecker-K4XY. Great fun was had

by all. Thanks and congratulations to everyone.

A Ham Service Note: Murray Green-K3BEQ in Cheverly, MD. asked me to let you know that he is now an authorized QSL checker for all of the ARRL WAS Awards, including 5 Band WAS. So give him a call to arrange for an appointment, during which cards can be checked while you wait.

Upcoming events include the Demo at the Town of Vienna, Fourth of July Celebration and the President's Picnic in August. Wonder if Paul will let me borrow his burger-flipper? That's it for now.

73, Brian - N1KCE

Quarter Century Wireless Association Washington, D.C. Chapter 23

At 12 noon, Saturday June 11, 1994, 25 members and wives of Chapter 23 & 91 gathered at a picnic hosted by Ethel Smith, K4LMB. This has been an annual event looked forward to by many people for the past several years. Following a delightful meal, a short business meeting took place to honor the Silent Keys, and to discuss several topics. A format was circulated to introduce a biography for Silent Keys, as a monument to those who have passed away so they will not be forgotten. Schedules for future events were announced; namely, a mid-August meeting for Saturday ant noon on the 28th, at the Galaxy Restaurant, Falls Church, VA., and the annual Christmas Party at the Ramada Inn also in Falls Church, VA. on December 17th at 12 noon.

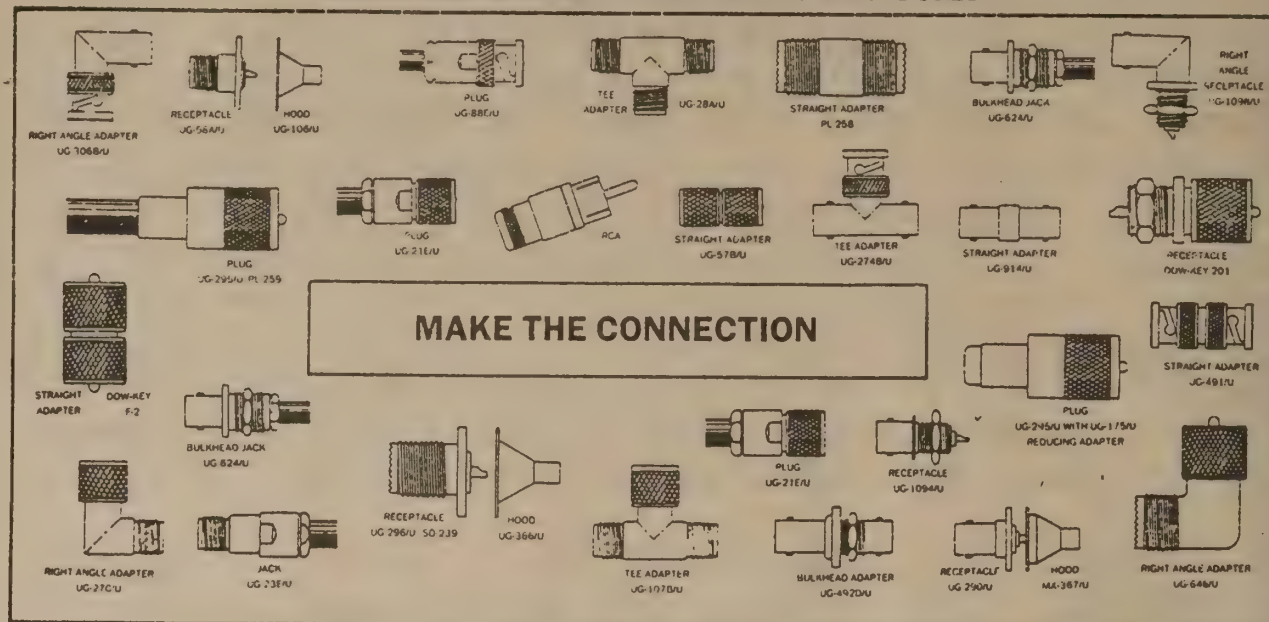
Jack Kingman, W4JT, displayed a formal collection of early radio vacuum tubes depicting their evolution as improvements transpired.

Although the weather was not particularly cooperative, everyone thoroughly enjoyed the company of old friends. Again, I cannot thank Ethel enough for all the work she personally did, to make this a perfect summer outing.

73's Stan Brigham, W3TFA

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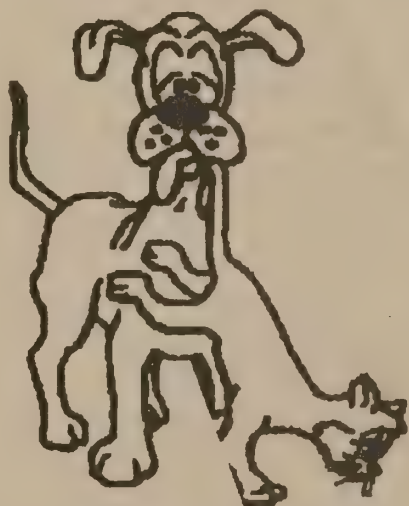


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Estate sales for Widows assistance handled by a FAR club will be published without cost.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone and all ads must be pre-paid. Ads that will be running for longer than 1 month must be accompanied by a letter stating the length that the ad is to be run. Since no effort is made to investigate advertisers, no warranty can be applied.

ALL ADVERTISING & SHACK SALES - COMMERCIAL AND NON-COMMERCIAL SHOULD BE SENT TO:

Doug Allen, Auto-Call Editor
8008 Shadow Oak Lane
Pasadena, MD 21122
(410) 437-6258

Copy MUST be received by the 5th of the month prior to the month of publication.

FOR SALE - 1111 Teletype Model 28 complete, 1 Dumont 5" Scope Model 304AR, 1 Hammarlund SP-600 Receiver. Call - Alan with Best Offer - (703) 683-1249.

FOR SALE - KENWOOD TH-225A 2-Meter HT with TSU-4 Tone Decoder, SMC-31 Spkr/Mic, PB-11 12VDC 800 mAh Battery, LH-5 Deluxe Leather Case, PG-3E Filtered Cigar Lighter Cord, BC-7 Rapid Charger and Larsen 5/8 Mag Mount Antenna. Guaranteed good as new. \$395.00. AG3V (410) 329-6725.

FOR SALE - Cubic Astro 103 Transceiver, power supply, manuals and cable. \$600.00. Wayne Cooper/AGAR (703) 671-5629.

FOR SALE - Complete Eldico SSB Station, P/S/Spkr. RF Mon/Phone-Patch, 6146 Finals. All good condition. \$300.00. Call Fred - evenings - (301) 567-2012.

FOR SALE - ICOM 24AT HT, 3 Battery Packs (BP84, BP82 & BP90), ICOM Speaker Mike, Radio Case and Charger. Original box with manuals. \$360.00. Call John (703) 250-1034.

FOR SALE - Telex Hy Gain Explorer 14, 4-element beam; Hy Gain Rotator CD-45 (Ham 4); Alinco Roof Tower ETS-210. Package-\$475.00. McLean, VA (703) 356-0996.

FOR SALE - ROHN 54' HEAVY DUTY self supporting Tower, BUTTERNUT HF6VX vertical (All HF Bands), New ALPHA DELTA CLP rotor cable lightning arrestor, New TEN-TEC 5061 1.5KWW Low Pass Filter, MFJ 1.5 KW dummy load, BELDEN RG-213U coax (both new & used). Call for details. AG3V (410) 329-6725.

FOR SALE - 40' Tower, in 10' sections, tilt-over base, top section for mast. 12" spacing on 1" OD tube. \$150.00. Tokyo Hi-Power HL-120U, 70cm brick, 10W-120W. No Pre-amp. \$200.00. Rf Concepts RFC 4-310, 70cm brick, 30W-100W, Pre-amp. \$225.00. Call for above items. Joe Mack/NAA3T HM. (301) 662-3486 (Frederick), Wk. (301) 402-4573 (Bethesda).

FOR SALE - TOWERS: ROHN 25G Tilt-Over 70 foot with top section; US Tower tubular crankdown Tilt-Over 50 foot; ROHN HBX 48 foot Self-Supporting; AMERICAN GUY tower 140 foot with top section. (301) 474-7405. Dave/N3EJT.

FOR SALE - ICOM R-7000 25MC/2GHz, 200 memories, Like NEW. \$795.00. Bob/W4JNN (703) 560-7161.

FOR SALE - TANDY 1000TL Desktop Computer, 32MB Hard-drive, 720MB 3.5 Floppy, 360MB 5.25 Floppy, 2400BPS internal modem, Mouse, CM-11 Color Monitor, Desktop power switch/surge protector, Printer Cable, with MS-DOS 6.2, Norton Utilities 7.0, Procom Plus 2.01, Wordperfect 6.0. Guaranteed Like New. \$695.00. AG3V (410) 329-6725.

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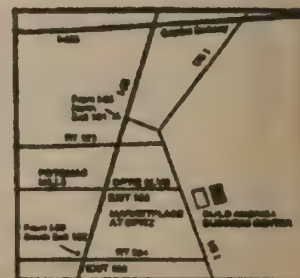
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NEW! 1994-1995 ARRL REPEATER DIRECTORY (List \$6.00) 1-9 ONLY \$5.50; 10-up \$5.15.

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FOR SALE - Alinco DR-110 just tuned by factory, \$145. Also B & W 1kw, 75 ohm Low Pass Filter, \$10. Call Burt/K2STV, (301) 948-2347 - Gaithersburg, MD

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Alan ((703) 683-1249.

WANTED - Dead Atlas 210 of Drake TR-7. Tad-KB4TUW, 3032 Park Ave., #3; Richmond, VA 23221-1633. Phone (804) 358-3732 after 7pm.

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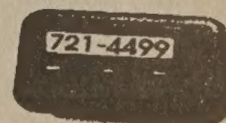
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Copy for Auto-Call will be accepted in any form - handwritten, typed, compatible computer disk or modem. All hard copy is reformatted to preserve uniformity of style in the magazine. We use Word Perfect 5.1 for Windows for word processing, Ventura Publisher for page layout and CorelDRAW 3.0 - CD-ROM for Graphic Design. We also use a Full Page Scanner with WordScan OCR to scan text and graphic's directly into Ventura Publisher. Photo Styler is used to enhance and halftone images. We will accept 5.25" or 3.5" MS-DOS diskettes is ASCII format. Type all headers, bylines and body text flush left with no margins. Single space after periods, do not indent paragraphs and double space to begin new paragraph. If you have any questions please feel free to contact: Doug Allen - (410) 437-6258.

In determining space requirements, figure about 700 words per page (50 lines at 12 words per line) - not including the space taken up by headings, photographs, etc. Either black and white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper and should be in proper page ratio, (Copy space is 7" wide by 9" high). Copy can be reduced or enlarged as necessary.

SHACK SALES

Deadline for copy is the 5th of the month preceding the publication date. Shack sales will NOT be accepted over the telephone. Full address must be provided for our reference but need not be published. Each ad must include the full name of the advertiser. If the full address is not included, we prefer to include the city along with the telephone number so that readers will know whether a long distance charge is involved. The entire telephone number - including city and state - is counted as only one word. We do not count postal zip codes. Otherwise, each word, abbreviation, model number or group of letter/numbers is counted as one word. Remittance must accompany each ad.

See next column for additional information on advertising. For further information, please phone the Auto-Call editor at (410) 437-6258, Pasadena, MD.

ADVERTISING

SHACK SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at 3¢ per word - with a \$1.00 minimum. Commercial vendors and non-subscribers rate is 17¢ per word - with a \$5.50 minimum.

Special headings or special spacing may be used (e.g., one item per line) but such ads are charged at a column inch rate - \$1.00 per column inch for non-commercial ads, \$5.50 per inch for commercial vendors and nonsubscribers

Commercial vendors should include the ad size and length of run (e.g., 1 year, 6 times, etc.) on company letterhead and it must be signed by the person authorizing payment for the ad. Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

DISPLAY ADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the shack sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

Display ads are charged according to size and duration of run as shown below. All advertising must be prepaid for at least the current month.

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1/3	6	40.00	46.00	51.00	54.00
1/4	4½	33.00	38.00	41.00	43.00
1/6	3	22.00	26.00	28.00	30.00
1/8	2¼	17.00	20.00	22.00	23.00
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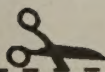
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AUTO-CALL

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Hugh Turnbull, W3ABC
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College Park, MD 20740
Phone: (301) 927-1797

Roanoke Division Director
John Kanode, N4MM
Rt. 1, Box 73-A
Boyce, VA 22620
Phone: (703) 837-1340



August 1994

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Adams County D.O.S.	2 Antietam PG Wireless IBM/WMA	3 BARC MARC	4 Anne Arundel V.O.A.	5 Mobileers Shenandoah	6 Green Mtn. Stafford
7	8 Carroll Cnty PVRG	9 Frederick Woodbridge	10 Pentagon S. Patuxent ***FAR***	11 AMRAD MADRAS Mt. Vernon N. VA. QCWA #150	12 Alexandria S. Maryland Vienna	13 Stafford North Point
14	15 Ole VA Hams Sterling Park	16 Antietam Arlington	17 BARC Goddard MARC	18 Anne Arundel QCWA #20	19 Rock Creek Shenandoah	20 Stafford
21	22	23 Columbia	24 Laurel QCWA #20	25 MADRAS St. Mary's	26 Central MD Vienna	27 Stafford
28	29	30	31			